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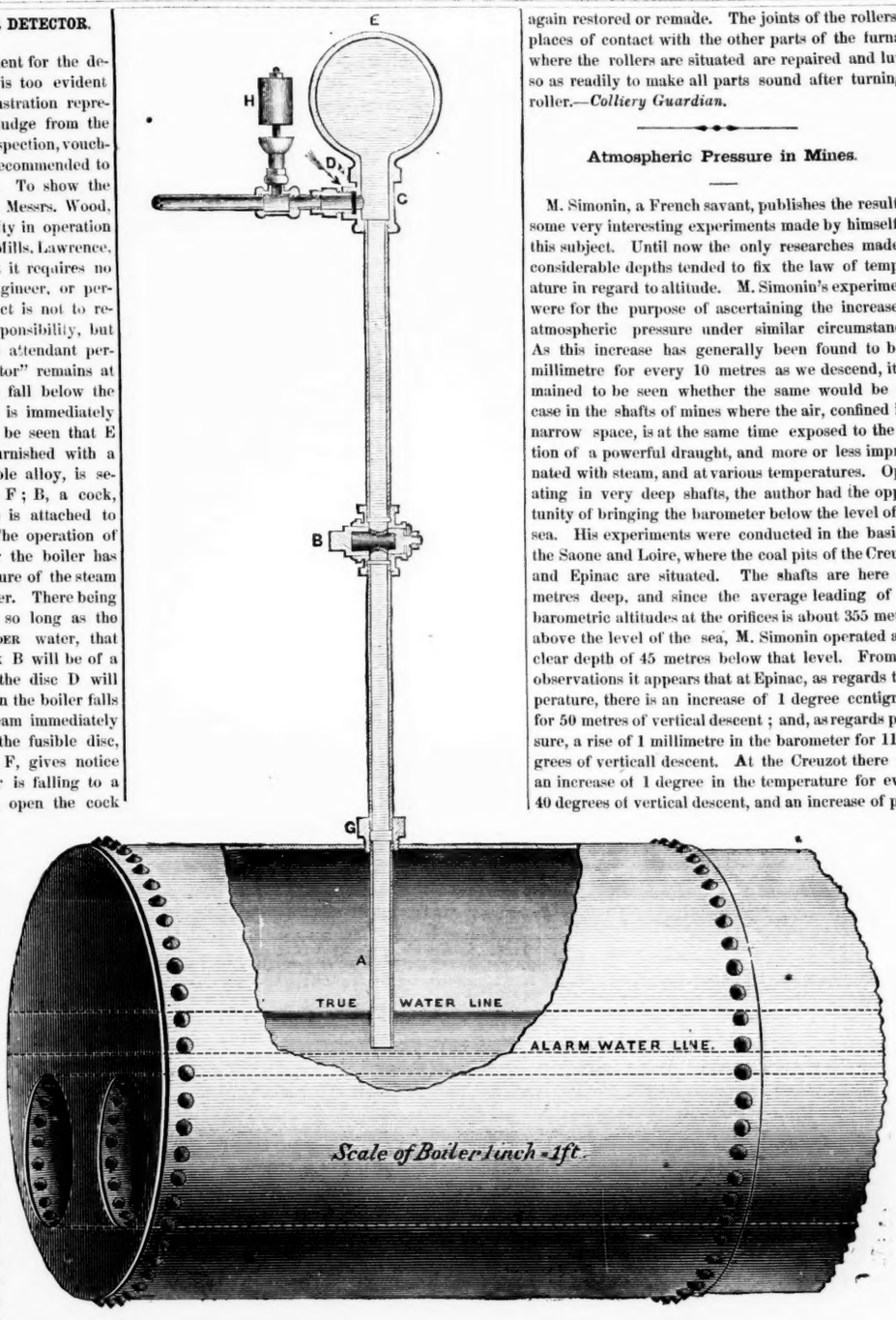
ASHCROFT'S PATENT LOW-WATER DETECTOR.

The importance of a reliable instrument for the detection of low-water in steam boilers is too evident for comment. The accompanying illustration represents a "Detector," which, if we may judge from the numerous letters presented to us for inspection, vouching for its efficiency, may safely be recommended to those in need of such an instrument. To show the favor with which it has been received, Messrs. Wood, Morrill & Co., of Philadelphia, have fifty in operation in their establishment, and the Pacific Mills, Lawrence, Massachusetts, sixty. It is stated that it requires no care or attention on the part of the engineer, or person in charge of the boiler. The object is not to relieve the engineer from care and responsibility, but to act as a vigilant watchman. If the attendant performs his duties faithfully, the "Detector" remains at rest; but if the water is allowed to fall below the alarm water-line (see cut) an alarm is immediately given. By reference to the cut it will be seen that E is an air chamber; C, a chamber, furnished with a union joint in which D, a disc of fusible alloy, is secured and made to close the opening F; B, a cock, and G, a coupling by which the tube is attached to the boiler; H, is an alarm whistle. The operation of this instrument is as follows: After the boiler has been filled to the water-line, the pressure of the steam forces the water up into the air chamber. There being no circulation through the instrument so long as the lower end of the tube remains UNDER water, that part of the column above the cock B will be of a comparatively low temperature, and the disc D will be solid. But whenever the water in the boiler falls BELOW the end of the tube, the steam immediately displaces the water in it, and melts the fusible disc, and rushing out through the opening, F, gives notice through the whistle that the water is falling to a dangerous point. To replace a disc, open the cock cautiously until the water reaches the opening at the top, then shut the cock, and when the water above it has become cool, the disc may be replaced with safety, and the cock fully opened. Address communications to John Ashcroft, 50 John street, New York.



Smelting Furnaces.

Mr. William Balk, of Hanover, engineer, has specified certain "improvements in furnaces used for smelting and melting iron and other metals." This invention is especially applicable to those classes of furnaces which are worked continuously, and are only stopped when parts are burned or worn out, such as blast furnaces employed in smelting iron or other ores; and the invention consists in applying rollers at those parts of furnaces which are most liable to wear or to be burned out; these rollers are arranged to be capable of being turned so that the surfaces which have formed part of the interior of a furnace for a time and become thereby burned and worn, are turned away from the interior, whilst other parts of the rollers which are new or have been restored or re-made are at the same time turned inwards; by which arrangements and constructions of furnaces the parts most liable to wear are readily restored without stopping the furnaces, whilst the parts of the rollers which have for a time been interior of a furnace can, when turned outwards, be again restored or remade. The joints of the rollers or places of contact with the other parts of the furnace where the rollers are situated are repaired and luted so as readily to make all parts sound after turning a roller.—*Colliery Guardian.*

Atmospheric Pressure in Mines.

M. Simonin, a French savant, publishes the result of some very interesting experiments made by himself on this subject. Until now the only researches made at considerable depths tended to fix the law of temperature in regard to altitude. M. Simonin's experiments were for the purpose of ascertaining the increase of atmospheric pressure under similar circumstances. As this increase has generally been found to be 1 millimetre for every 10 metres as we descend, it remained to be seen whether the same would be the case in the shafts of mines where the air, confined in a narrow space, is at the same time exposed to the action of a powerful draught, and more or less impregnated with steam, and at various temperatures. Operating in very deep shafts, the author had the opportunity of bringing the barometer below the level of the sea. His experiments were conducted in the basis of the Saone and Loire, where the coal pits of the Creuzot and Epinac are situated. The shafts are here 400 metres deep, and since the average leading of the barometric altitudes at the orifices is about 355 metres above the level of the sea, M. Simonin operated at a clear depth of 45 metres below that level. From his observations it appears that at Epinac, as regards temperature, there is an increase of 1 degree centigrade for 50 metres of vertical descent; and, as regards pressure, a rise of 1 millimetre in the barometer for 11 degrees of verticall descent. At the Creuzot there was an increase of 1 degree in the temperature for every 40 degrees of vertical descent, and an increase of pressure of 1 millimetre for every 10 metres. The averages, therefore, are: For temperature, 1 degree for 45 metres; and for pressure, 1 milimetre for 10½ metres. M. Simonin has taken care to operate only on shafts through which pure air enters.

Mining Summary.

Colorado.

We extract the following from the report of Surveyor-General Pierce upon the resources of Colorado. It comes to us bearing date August 15th: The winters of 1861, 1862 and 1864 were very mild, there being but few cloudy days and very little snow; the two succeeding winters were very cold, the winter commencing in the middle of October and continuing until the last of March, the thermometer indicating on two different nights 32° below zero, although the days were generally warm and pleasant. The summers are dry and hot during the day and cool at night on the plains; always cool and pleasant in the mountains. During the months of June, July and August, light showers generally occur every afternoon near the foot of, and in, the mountains; during the rest of the year rain rarely falls. To a geologist nothing can be more certain than that at least one-third of the plains of Colorado contain coal, and it has been found in enough localities to prove that that theory is correct. As yet, very few coal veins have been opened and worked, and most of these are on lands that had been surveyed previous to the discovery of the coal, so that the amount found and returned by the surveyors is comparatively small. In a country where there is not a stream that does not contain some indications of coal, it is difficult to say what land should be returned as coal land. A small iron furnace is in operation on the Boulder, near Boulder City, working what is known as "kidney ore," which is found in beds along the foot of the mountains throughout the Territory, and yields about thirty per cent. of iron. (Sixty-five per cent. is the real yield.—Ed.) Spathic ore, yielding seventy-five per cent. of iron, is found in veins near Golden City, and there is no part of the Territory that does not produce iron in some workable form. Rolling mills will probably be erected during the coming year at Golden City, for the purpose of preparing railroad iron, for the railroad from Golden City to Central, and for use at the mines. There is no reason why the iron for a portion of the Pacific Railroad should not be manufactured here. Alum, salt, petroleum, gypsum, soda, lime, lead, copper, antimony, zinc, silver and gold, are found in various parts of the Territory. But one saline is yet worked, located in the South Park, and worked only in a small way; price of salt, twenty cents per pound. Petroleum wells are in operation near Canon City, on Oil Creek, producing about two barrels per day; price of refined oil, $3 per gallon. Other oil springs are found along the base of the mountains, but are not worked. A small mill for grinding gypsum is running on Bear creek. Lead, copper and antimony, though abundant and a great source of future wealth, will not pay for mining now, and must wait the coming of the railroad. Late in the fall of 1864, silver was discovered on the high mountains near the headwaters of South Clear creek, but the lateness of the season and the great altitude, prevented any developments until this summer. There are now some three hundred miners at work in that district, with every prospect of success. The ore assays from $100 to $2,000 to the ton, of silver, but how extensive the veins are is yet to be determined, though enough has been done to prove that they are workable. These veins are found at an elevation of from 11,000 to 12,000 feet above the sea, or above the limits of timber, in a portion of country to which access is had only by a horse trail, so that it will consume the rest of the summer to get a road built, and fairly test the ores by the application of machinery. Gold mining is almost at a stand-still, only 1,500 ounces per week is being produced in the whole mining region of Colorado, and the product for the year will not exceed 1,000,000. This result has been brought about by speculation, high prices of labor, and the Indian war. The speculation of last year caused an entire stoppage of all the old mills in order to introduce new machinery. This new machinery is now just beginning to arrive, having been stopped at the Missouri river and on the plains by the Indian troubles, and the consequent high price of freight, which rose during the winter to 25 cents per pound, and even now stands at 15 cents. A few of the new mills are now in motion, but at the present cost of labor, and everything else, they cannot more than pay expenses. Many companies are doing nothing; some waiting for machinery; some experimenting on new processes, and some fooling away their money by trusting their affairs to ignorant men, and some who never intended to mine outside of Wall street. Labor is from $6 to $10 per day; board $20 per week; hay in the mines during the winter was 25 cents per pound, and in the summer 4 cents; grain of all kinds from 10 to 25 cents per pound; wood from $10 to $20 per cord. Even at these prices there are many mines that pay largely. After a mine is well opened, and all machinery ready and in order, by the stamp mill process, a ton of ore can be mined and treated for thirty dollars. If all the gold could be extracted the profits would be enormous; but, in practice, the stamp mill does not save, on an average, more than twenty per cent. of the assay, making an ore that will assay two hundred dollars per ton, worth only forty dollars, or but ten dollars per ton profit on the richest ore here. There are, perhaps, ten lodes now worked in the Territory that contain over $200 in gold to the ton, and these alone can be worked at a profit. The number of lodes that contain from $50 to $150 per ton is almost countless, all of which could be worked with profit with labor at $2 per day, or by any process that would extract ninety per cent. of the gold. The first object can be attained only by the building of the Pacific Railroad to some point within the Territory. Every hundred miles of that railroad completed will add hundreds to the lodes that will be worked, and when the whole is completed there is not one of the thousands of lodes in Colorado that will not contribute its share to the wealth of the nation. The government will expend this year on the Indian war, and the protection of the line of communication, enough money to build the railroad to this point. The railroad would put an end to all trouble with the Indians, and add millions to the resources of the nation. The government gives to the railroad companies enough to build the road, and yet, after three years of talking, not one bar of iron is laid west of the Missouri river. The question whether any process could be invented which would save all the gold in the ore, is being tested by every means here, and two processes have been introduced which bid fair to succeed. The first is a disintegrating process by which the ore is reduced, by means of superheated steam, and at the same time freed from sulphur. It is then amalgamated perfectly, so that ore which yielded but $20 per ton under stamps, yielded $200 per ton, and an assay of the tailings showed no gold. The other process first crushes the ores, dresses them with water till nothing but the sulphurets remain; these are then smelted with lead and other fluxes in a furnace, and the whole drawn off in kettles and allowed to cool, where the gold and silver are found in the lead, while the copper and iron remain in the slag. The lead is then roasted off, leaving the gold and silver. Both these processes are new here, and will have to stand the test of working on a large scale; but the experiments, so far, indicate success. Should this succeed as well as it is hoped, they will render useless much of the machinery that has been brought here, and revolutionize the whole system of mining in Colorado. All the gold-bearing ores of Colorado are sulphurets of copper, and contain from ten to thirty-five per cent. of that metal. At present the copper is not worth smelting, except, perhaps, a single furnace might afford to run on the local demand. The extraction of the gold only prepares the ores for reduction to copper, and as soon as the railroad is finished any amount of copper can be smelted. . . . A correspondent of the *Alta*, at Gold Dirt, gives the following items concerning the Hope Mill: "The mill is three stories high. On the upper floor a "Blake" crusher breaks the ore to about the size of a bean. The ore thus broken passes into a ball-grinder on the floor below. This grinder is formed of a revolving iron barrel, with the staves about one-sixteenth of an inch apart. Within the barrel there is about half a ton of two-pound balls to pulverize the ore until it is fine enough to pass between the staves. It is then carried by an elevator to the upper floor, where it passes on to a drying table (the top of the furnace), afterwards being scraped by a rake into a long trough, where an archimedean screw works it into an elevator, which carries it to the upper floor again. Here, after passing through a screw, it runs into an iron pipe, four inches in diameter, at one end of which is a small blower, and at the other the fireplace, consisting of a circular sheet iron stove, three feet in diameter and three in height, lined with fire brick. This fireplace opens into a furnace. The blows before mentioned force the pulverized ore through the flames in the fireplace (causing the sulphur to ignite) into the furnace, where the ore, coming in continuously with flaming sparks, keeps the whole mass in the furnace on fire, until all the sulphur has exhausted itself and the furnace is full. The vapors and fumes pass off through a hole at one end of the furnace, connecting with a high chimney. The ore is then scraped out of the furnace into a vault below, and is allowed to cool. It is then carried by elevators to the second floor and fed through a hopper into small ball-grinders, on the same principle described above, the balls only weighing two ounces each, of cast iron. These pulverize the ore as fine as flour, and it is afterwards put through a wire bolter (80 meshes to the square inch) into a vat where there is a stream of water. The ore is mixed with the water by revolving combs, and the mixture then passes out of the vat by pipes on to the copper amalgamating tables, which are the shape of a washboard, and are kept oscillating by machinery. These works can, it is stated, treat forty tons of ore daily, and only require eight hands and a fifteen horse-power engine to run them." . . . The success of the Lyon's and Keith's methods in saving the precious metals, has caused Colorado stocks to be in a little better demand in the East, and there is every prospect we shall have lively times shortly. In a few weeks it is expected that some twenty mills will be rolling out the gold. The Naragansett, Gunnell, and Smith & Parmlee mills are doing well. The Black Hawk Company, one of the strongest in the Territory, will soon have sixty stamps going on the old process, intending afterwards to smelt the tailings in works they are going to build for that purpose. The local papers almost daily report sales of mining property in the East, and sometimes in Europe. Many of these, I am afraid, are not founded on facts, or are greatly exaggerated before they reach the sanctums of the purveyors for the press. It is not likely that many large sales will be effected before some good dividends make their appearance. . . . The Hope Company (Baltimore capital), who last year purchased part of a celebrated lode, known as the "Gold Dirt," and erected a large mill, with machinery to work the Keith Desulphurizer, at an expense of over $250,000, is cleaning up $2,000 per week, and expect to treble this yield when they get all their shaking tables at work. The Keith process for desulphurizing refractory ores has cost its projectors a large sum of money and much time and patience to perfect. It is now considered a success, and is greatly superior to anything else in the field, always excepting the old smelting process. . . . A railroad is being projected and the survey is being made to connect the gold mines of Gilpin county with the coal mines and water powers on Clear Creek near Golden City. This road is becoming a necessity on account of the scarcity of wood in the mines. By it the ore will be brought down to the coal to be treated, and the coal will be carried up to the mines for hoisting ore. This road will be built from iron made here, and will be 22 miles long. . . The Overland Stage Company are now engaged in making a wagon road from Prove, in Utah, to this place direct. This road will shorten the overland route about 100 miles, and passes through the finest agricultural portion of Colorado, and a part too which as yet has not been settled, and which will need surveys as soon as the road is opened. In spite of the stoppage in the mines the Territory has every appearance of prosperity. The towns are being built up with brick buildings, and town property has advanced in value.

California.

Santa Clara.—There are now about 1,300 men engaged in mining, reducing, sorting, and other work at the New Almaden Quicksilver mines. The company have recently erected new and very extensive reduction works, on an improved plan, and in a short time they will be put in operation. It is believed that a large saving will be made in the quicksilver, by this improvement, and that the company will be thereby enabled to work at a profit, a lower grade of ore than they have ever been able to do heretofore. Near the mouth of the main tunnel many thousands of tons of what was considered refuse rock—too poor to pay for working by the old process—had accumulated in years gone by, and the company are now overhauling this, sorting it down closely, and working it, getting handsome returns from the material rejected by the first workers of the mine. Prospecting is constantly going on, tunnels being run into the mountain in every direction, and new leads of smaller size than the original New Almaden, developed and made to yield their quota towards the grand aggregate product of the mine. The "Cora-Blanche" is the most extensive and promising of these new leads. The average quality of the ore worked at this time is very much below the standard of a few years since, but the improvements in the system of reduction, and the thousand and one labor-saving inventions brought into use by the present company, enable them to work a quantity so much the greater, that the annual production is steadily increasing rather than decreasing.

Placer.—The sluices of the Beloit claim at Dutch Flat, says the Auburn *Stars and Stripes*, were visited one night last week by robbers, and the riffles removed, but the scamps got nothing, as the company had just cleaned up $1,900 from 14 days' washing. The Why Not Company cleaned up recently and got a handsome dividend—exact figures not ascertained. The Iowa Hydraulic Company cleaned up a few days since $1,800, the result of 17 days washing. The Yuba Ditch, which supplies the mines in the vicinity of Gold Run with water, has been seriously damaged by land slides in the vicinity of Bear Valley. Workmen have been employed to repair it. An immensely rich vein of quarts, passing through the Fair Hydraulic claims, situated on the ravine immediately south of Gold Run, was unearthed a few days since. Several nuggets, varying in size and value from $5 to $25, were found, in addition to which good assays have been obtained from all portions of the ledge thus far tested. . . . Last week the Rough Gold Company at Bath cleaned up from one week's run 173 ounces of gold. The previous week they cleaned up over 160 ounces. Other companies in the vicinity are doing well, but we have no figures from them. . . . A very rich quartz ledge has been struck in Dead Man's Canon, about three and a-half miles from Auburn. . . . The Minerella quartz claim in Baltimore Ravine near Auburn, owned by Mallett & Havey, is, says the Auburn *Stars and Stripes* of April 11, one of the best in the district. The ledge is about a foot in width, and the rock taken from a shaft sunk on the ledge to the depth of thirty feet, shows considerable free gold. Five tons of the rock taken from near the surface and crushed in an arastra, yielded over an ounce of gold to the ton, while a good prospect was obtained from the trailings. They are now taking out rock which they believe to be much richer than that which they crushed. Mallett & Havey are now negotiating for a mill, which they design erecting upon the ledge, and which, no doubt, will prove a remunerative enterprise to them. They are also about commencing a tunnel to strike the ledge below the bottom of the shaft—a work which will greatly facilitate the getting out of rock. . . . We understand that the hydraulic diggings owned by B. F. Moore & Co., at Gold Run, are paying from $5,000 to $6,000 per week. Near by are the claims of Rathburn & Co., and some dozen other companies, which are realizing from their hydraulic claims all the way from $3,000 to $5,000 per week.

Mariposa.—A very rich specimen of copper ore, from the Buchanan lode, situated on the head of the Chowchilla, has been handed to us, says the Visalia *Delta*, by Rev. J. McKelvey. It looks as though it was nearly all copper, and McKelvey assures us that by smelting in a common forge it yields 75 per cent. of pure metal. The lode is five feet wide and rich all the way. If this is so, and we believe it is, Mariposa will lead the State in copper. . . . C. T. Meader & Co., of Stockton, shipped for San Francisco, lately, 86,130 pounds of copper ore, from the Union mine, Copperopolis. . . . The Mariposa *Gazette* of April 7th says: The predictions of certain wise ones that the copper mines on the Chowchilla were of no consequence, are not likely to be verified. A great many tons of nearly pure copper have been smelted in the last few months, and instead of the mines giving out as they are sunk upon, they increase in richness, width and permanency. The vien at Buchanan Hollow is five feet thick, and of the richest carbonates. On Thursday last Haskall operated with his smelting works twenty-seven hours, and the product of copper, in pigs, during that time, was two tons and a-half. We doubt whether similar results can be shown since the organization of the State.

Shasta.—The *Courier* of April 7th records the following mining intelligence: "On Saturday last the Washington Quartz Company made their clean up for twelve days with ten stamps and twelve days with eight stamps—an average of twenty-four days with nine stamps. The result, as assayed by E. Lewin & Co., was the snug sum of $5,371 31. For this run the company divided $4,290 to twelve shares—$357 50 to the share. The rock crushed averaged $20 to the ton. The company now have their lode stripped one hundred and fifty feet—from top to lowest tunnel—by four hundred feet on the face. The ledge at the bottom is six feet thick, and going up it varies from five to eight feet. There is another tunnel in over four hundred feet, and about forty feet short of the ledge, that will strike it some two hundred feet lower. We are assured that the company can easily select rock from which a run of $15,000 or $20,000 could be had in a few days crushing,

if it was at all desirable to get up a sensation. We are somewhat particular in giving these returns, from the fact that there are outside barbarians who lack faith in the richness of our quartz lodes. We find that a company at Middletown are going to erect a flume some half mile in length, to carry water from the Clear Creek Ditch to some mining ground discovered and prospected last Fall, lying along the southern side of Oregon Gulch. This flume will not only furnish the company's claim, which is rich and extensive, but will be of sufficient capacity to afford water for hundreds who can and will occupy ground below it. The Horse Shoe Bend will be open for work as soon as the waters subside to the capacity of the tunnel, and a river bed of over three miles will be laid bare to the operations of the hardy miner. The Potosi mill started last Saturday. It has four stamps and two pans, and is propelled by a hurdy-gurdy wheel, and it by hydraulic power. Members of the company assure us that it works like a charm. As a beginning, the mill is working up a lot of loose truck that has been lying around, and on Monday will commence on Potoski rock.

Nevada.—The Eureka Mine, says the *Transcript* of April 6th, is located at North San Juan, and is the leading hydraulic mine in this part of the State. The parties who took up this claim a number of years ago, expended $180,000 before a cent was realized from it. About a year ago the original owners sold to a San Francisco company who are now working it. At the time it was sold it was paying from $15,000 to $20,000 at each run of from five to ten days. The largest amount ever taken out in one run of ten days was upwards of $30,000, and to-day it is paying as well if not better than ever before. . . . The celebrated Yuba Tunnel at Sebastopol, in Bridgport township, is nearly completed. The company commenced operations on this tunnel during the year 1860. They have worked constantly on it for the past six years, and expended an immense amount of money. It has cost them as high as $40 per foot, and the lowest ever paid was $15, the latter amount being paid for a few feet only. The distance already run is 3,000 feet. The claims owned by the Yuba Tunnel Company have been lying idle as they could not be worked until the tunnel was completed. . . . We learn that nearly every claim from North San Juan to Timbuctoo is being successfully worked. A great many of the claims between these two places have not been worked for years until this season. They are all paying well and give employment to hundreds of men. . . . The old Palmer diggings, which has been unworked for several years, were started up at Sebastopol a few weeks ago. The company cleaned up, last week, a large amount of dust. . . . Kerr, Falcon & Co., at Shady Creek, near Ray's ranch, in Bridgport township, are taking out an immense amount of money. . . A blast of 300 kegs of powder was let off in the Golden Gate claims, at North San Juan, one day last week. This blast shook the whole town, and in a house near by a man was thrown completely out of his chair while reading a paper. Considerable damage was done by the breaking up of pipes, hose, flume, etc., in the diggings. Scarcely a piece of the cement can be picked up in the Golden Gate claims but what is filled with gold. . . . We understand that several very fine ledges of quartz have been discovered on and near Bush creek during the past few weeks. One of them is very rich indeed, and the ledge is extraordinary large. . . . The French Company, at French Corral, cleaned up last week, one run of ten days, the sum of $27,500. . . . Crall & Co., owners of the American Company's claims at Sebastopol, are preparing to put in their claims a blast of 600 kegs of powder. The cement, which is very rich, requires to be loosened and broken up by blasting, after which it is very easily run off. These claims have been paying on an average of $1,000 per day during the whole season. . . . The Knickerbocker Company at North San Juan put off a blast of 200 kegs of powder last Thursday, which tore up the ground for a great distance. These claims are also very rich, being the same kind of cement as that of the Golden Gate and American companies. . . . From Birchville we learn of the unparalleled prosperity of the miners. At ths last clean up of the San Joaquin Company they took out $8,000. The Kennebec and American companies, near by, are now taking out an enormous amount of money. No claims in the county pay more regularly than those in and around Birchville. The same paper of Adril 10th says: A contract has been taken by the owner of the Palmer mill to crush rock for the season, taken from the Star Spangled Banner mine. It is estimated that a hundred tons of rock can be taken out of the Banner mine every twenty-four hours, if mills enough could be secured to crush it. . . . We understand it is the intention of the owners of the Talbot quartz ledge, at Willow Valley, to put up a mill upon their ledge some time this season. They are running a tunnel and taking out some splendid looking rock. . . . We understand that a company of Portugese mining at Pleasant Fat struck some very rich dirt one day last week. At one clean up they realized the sum of $1,500. . . . At Little York there are two mills which are kept in constant operation working cement. The claim of Buckman & Curran, which has an eight-stamp mill, is paying handsomely. They commenced running about three months ago and have averaged $1,500 per week in the working of the cement. The top dirt, from sixty to eighty feet to the cement lead, which is washed off and run through sluices, has averaged $1,000 per week—making the weekly returns from this mine $2,500. The other mill at that place is owned by Pond & Remington. They have just struck the celebrated cement lead, which prospects from $10 to two ounces to the pan. They will commence washing their top dirt in the ceurse of a week, being the same kind as that of Beckman & Curran.

Siskiyou.—All the Chinese claims on Lower Hum bug, from Frenchtown to the Klamath River, says the Yreka *Journal*, have been filled up by the late severe rain storm, but the Big Flume Company is all safe, having been busy ground-sluicing since last November. Mining on Long Gulch and Canal Gulch, north of town, has been paying rich lately, some of the claims realizing as high as $100 a day clear.

Idaho.

At a public meeting of the citizens of Boise City and vicinity, recently held at that place, for the purpose of devising the necessary steps to be taken on their part to secure the establishment of a United States Branch Mint, a Central Committee was appointed consisting of E. J. Curtis, chairman, H. C. Riggs, A. W. Flournoy, Joseph Miller, John Cummins, Hill Beachey, and C. Jacobs, who were instructed to obtain all the available statistics and data relative to the amount of the precious metals produced annually in Idaho. The following statistics and estimate were received from the different mining camps, in response to the inquiries made by the committee. Hon. W. H. Parkinson furnished the following statement from Pioneer City, Boise, March 7, 1866: "The amount of gold dust taken from the Pioneer District, according to the best information I have, will not fall short of one million ($1,000,000) dollars for the year 1864; my opinion, however, is that it will exceed the above amount." There are many other rich and extensive mining districts lying within Boise county; the gold and silver product of which cannot be ascertained at this time. From the most authentic information at hand, the committee is of the opinion that the following estimate will be under the actual amount of bullion and gold dust produced and taken from the mines in Boise county and its immediate vicinity: $400,000 per month; or, $4,800,000 per annum. Mr. L. Hartwig, Mining Engineer, whose long experience in Mexico as a practical miner engaged in the reduction of silver ore, and whose perfect familiarity with the extent and mineral resources of the South Boise country, reports as follows to the committee: The number of mills in Alturas county, which lies within one hundred miles of Boise City, may be designated as follows:

Harris Mill	12 stamps.
Idaho Mill	12 "
Farnham Mill	30 "
Waddingham Mill	10 "
Libby Mill	10 "
Nelson Mill	30 "
Maj. Speers Mill	20 "
De Frees Mill	10 "
Total number of Mills	8 "
Total number of Stamps	134 "

There are now in operation about twenty arastas. It is estimated that from three to six new mills will be erected within six months in the Yuba District, with from ten to forty stamps each. But should there be no increase of mills other than those at present in operation and course of construction, the amount of bullion from the mills and arastas as above designated, must reach $4,500,000 the present year. The yield from the placer mines is variously estimated at from $120,000 to $265,000 per annum. The committee is of the opinion that the amount will not fall short of $120,000 per year. There can be no doubt but that every dollar invested in the mining and milling property in the South Boise mines will return in due time its ten-fold profits. With well directed labor and skill in the reduction of the ore, and the necessary amount of capital to open the mines, under the management of practical and competent men the South Boise mines will rival the richest found on the continent. The milling companies have had much to contend against during the past year. The disadvantages were of that nature which could not be guarded against, and which, in many respects, are common and incident to new enterprises and operations. The lateness of the season at which their mills were completed, the severity of the winter—which prevented the opening of the mines and the transportation of rock to the mills—though it could not be foreseen, may be guarded against and avoided in the future. . . . . O. H. Purdy furnished the following from the Owyhee Mining District:

MORNING STAR MILL—EIGHT STAMPS.

Number of days running time	426
" tons ore reduced	7369 5-8
" ledges ore taken	7
Am't of bullion up to M'ch 9, 1866	$1,127,617.39

MORE, FOGUS & Co., Proprietors.

MINEAR MILL—FIVE STAMPS.

Number of days running time	136
" tons ore reduced	1,101 3-10
" ledges ore taken	1
Am't of bullion up to M'ch 9, 1866	$172,860.16

MORE, FOGUS & Co., Renters.

This mill has been rented by More, Fogus & Co. since September 10th, 1865, and working "Oro Fino" ore.

JACKSON MILL—FIVE STAMPS.

Number of days running time	37
" tons ore reduced	431 1-4
" ledges ore taken	1
Am't of bullion up to M'ch 9, 1866	$48,084.19

MORE, FOGUS & Co., Renters.

This mill has been rented by More, Fogus & Co. since October 10, 1865, and working "Oro Fino" ore.

VASS MILL—FOUR STAMPS (LIGHT).

Number of days running time	73
" tons ore reduced	124
" ledges ore taken	8
Am't of bullion up to Feb. 1, 1866	$15,194

VASS & Co., Proprietors.

MINEAR MILL—FIVE STAMPS.

The following is the report of the Minear Mill—five stamps, from the time it first started up to the time More, Fogus & Co. rented it, during which time it was engaged in prospecting ore from the Morning Star, Roxbury, Allison, Whisky, New York, Caledonia, Home-Ticket, Ophir of Idaho, Ladd & Reed, Golden Eagle, Oro Fino, Eureka, Silver Legion, Whisky Gulch and Badger ledges:

Number of days running time	150
" tons ore reduced	1400
" ledges ore taken	18
Amount of bullion	$100,000

A. P. MINEAR & Co., Proprietors.

In addition to the above, but of which I am not able to give returns at present, are the Ainsworth Mill, of ten stamps, running time about one hundred days, working ore from the Oro Fino Extension, Poorman, Trook & Jennings and Columbia ledges. Probable amount of bullion, $500,000.

Shonebar Mill	10 stamps
New York & Owyhee Mill	20 "
Cosmos Mill	10 "
Lincoln Mill	20 "
Grenzebach Mill	10 "

have all yielded more or less bullion, but have not reported. Next season they will be in successful operation, and will, without doubt, yield over $4,000,000 in bullion.

RECAPITULALION.

No. of Mills	10
" Stamps	102
" Days running time	820
" tons of ore reduced	10,336 1-3
" ledges ore taken	31
Amount of bullion	$1,463,755.74
Average yield per ton	$142.58
Cost of transporting bullion to San Francisco @ 8 per cent	$117,100.45
Cost of transporting coin from San Francisco to Owyhee @ 4 per cent	58,550.22
Total expense	$175,650.67

It is difficult to estimate the amount of shipments of gold dust from this county during the past three years. In addition to the above the committee received from Hon. Gilmore Hays, the County Recorder of Owyhee county, a systematic report, corroborating the facts so set forth in the report of Mr. Purdy; also a letter from A. Chittenden, Esq., Assayer at Ruby City, Owyhee, a gentleman of great learning and scientific attainments. The Committee also received from a very creditable source the following statement, showing the amount of treasure passing through the office of Wells, Fargo & Co. at the Dalles, Oregon, from April, 1865, to September, 1865, a period of six months:

	FROM CANYON.	DALLES.	UP RIVER.	TOTAL.
April,	33,723	138,500	400,000	572,223
May,	34,567	112,050	500,000	646,567
June,	47,242	100,000	550,000	697,242
July,	56,308	108,000	475,000	639,308
August,	52,459	135,000	440,000	627,459
September.	51,606	207,000	450,000	708,606
Total,	$275,905	800,500	2,815,000	3,891,405

It will be seen that over two-thirds of the above amount was shipped from the "Up River," meaning the Boise Basin mines, to that of the Dalles, or any other intermediate point. It may be said, without the least disparagement to the other productive mineral localities in the Territory, that Owyhee has advanced more rapidly in the development of its mineral resources than any other section. To the unrivalled energy and enterprise of Messrs. More, Fogus & Co. is to be attributed the favorable impression at home and abroad of the Owyhee mines. The liberal spirit which has characterized throughout the operations of this Pioneer Company have only equalled their merited success and immense wealth.

Owyhee.—Upon invitation, says the Owyhee *Avalanche*, we visited the Dardanelles ledge. It lies at the head of Jacobs' Gulch about two miles north-west of Silver, and the same distance west of Ruby. It was discovered about six months ago by Messrs. Harkin, Franklin, and Bell Brothers. The discovery claims include eighteen hundred feet, and with the discoverers, Messrs. Dewey, Musgrave, McCann and Fingerlee are owners. A tunnel, run directly across the ledge, shows its actual width of solid quartz to be forth-three feet as measured in our presence. A shaft is sunk twenty-five feet in the bottom, and about forty feet from the mouth of the tunnel. This shaft is sunk fourteen feet from the north casing of the ledge. The ledge has been traced by labor and croppings over three thousand feet. We only heard of one extension being taken on the the North and two on the South. The discovery parties are interested in the extensions; also E. Bohannon and others in the North, and M. A. Edmonds and others in the South. The croppings are twelve feet wide on the surface, or the second South extension. The course of the ledge is North and South, and crosses the head of Rich Gulch. Its richness is unquestionable. It has been tried by every process, except mill. Several assays have been made from different portions of the ledge, and the average is $150 per ton. Mr. Bohannon obtained $1 83 in gold from two and one-half pounds of rock by hand process. Mrs. Harkin has prospected all qualities of it, and obtained flattering prospects each trial. By burning in the stove it blisters richly. After burning a small quantity this way, Mrs. H. panned out the ashes and got half an ounce of gold and silver globules. Messrs. Dewy and Musgrave have subjected the metal to acid tests, and are certain of its purity. The small bricks obtained by hand process are worth from three to four dollars per ounce. The small clay seams running through the ledge are full of free gold. Every pound of it yields a splendid prospect by the panning process. These are no sensation statements. The discovery was kept a secret until this week, for good reasons. In the meantime, frequent tests have been made, and work has progressed vigorously. The attention of nearly everybody being centred on War Eagle mountain, the secret was easily kept. There is a large tract of good timber at the mine and an eligible mill site, both of which are claimed by the Dardanelles Company. We believe this the most important discovery made in Idaho, not excepting the Poorman. With a small outlay of capital, this ledge can be made to supply a thousand stamp. There is no possible show of its being tied up by litigation—the ban that afflicts most valuable ledges.

Montana.

The Montana *Post* of March 17th contains the following interesting intelligence concerning the Indian difficulties: Four miles south of Benton, on Shonkee creek, one hundred lodges of Piegans are encamped, under the chief, Big Lake; thirty miles north of the fort, on

the Marias, is Little Dog, with one hundred lodges. The Bloods and Blackfeet are in very strong force near Little Dog's camp, having come down from the British line in large numbers within the past few months. They are the most hostile of all, and say they are coming into the fort. The Gros Ventres are the most peaceable of all, and express much sorrow for the murder of Euniche and Legree. Four hundred of the warriors are ready to set out with a force of whites to avenge their deaths. A careful summary of the recent depredations of the Blackfoot tribe shows that within the last three months there have been eleven men killed by them, and one wounded. In consequence of the troubles, a great stampede among Bentonian squaws is reported—the dusky mistresses leaving the good "muck-a-muck" of their white lords and searching the camp-fires of their blood kin. Many prospectors from the country north of the Prickly Pear have recently come in on foot, with their packs upon their backs, their horses having been stolen from them by the Indians, and they being afraid to remain unmounted among their foes. William Berkin and a small party of whites, who left here some time since, are reported to have arrived safely at the mouth of the Muscle Shell. Recently, four Blackfeet stole an ox from them, and being detected while butchering it, three of them were killed. A few Flatheads, who had accompanied the whites, were immensely tickled with the scalps, and are talking of having a big dance. The same paper of March 24th has the following: The subjoined short but pithy dispatch was received by us on Thursday evening: "Friend Ben: You may 'toot the old horn and blow the bazoo' as much as you please over Bear Gulch. It is enormously rich—claims are selling at $2,000, and scarce at that! Pet Hall, Dave Thompson, L. C. May and other Virginia boys are here. The stampede is greater than ever known to any mines before." The Elk Creek mines are also thought to be big, though they are not so well developed as yet. This is reliable. Washburn Stapleton called at our office yesterday. He is from Rattlesnake, and showed us some fine specimens of ore. From a sample of the quartz of one lode he extracted a button of silver, by melting, with the aid of a common bellows, a piece of ore lying on a bit of wood. On weighing it, it turned out at the rate of over $1,700 of silver to the ton, and about $4 to the ounce of bullion extracted, according to Gillett's estimate on trial of the contents of the button. . . . A correspondent of the *Alta California*, Helena, writes as follows: "I was not favorably impressed with the appearance of Virginia City, Montana, upon my arrival there. The town appears to be settled by a different class of people from the mining towns of California and Nevada. There does not appear to be the same energy and enterprise that manifests itself in California mining communities. The town was built up upon the discovery of gold on Alder Creek or Gulch, which is about fifteen miles long and very rich. I have heard very large estimates made of the amount of gold taken from this creek since the first discovery; some have put the figures as high as fifty millions, and the lowest estimate I have heard was thirty millions—both, I think, rather large; but from what I saw myself, I am satisfied there has been a large amount of treasure taken from the gulch, and I do not think much over half has been taken out, it being very imperfectly mined. There are several quartz mills in the vicinity of Virginia, some of which are working quartz with satisfactory results. I saw several gold bars, the product of a mill near the town; the Superintendent told me the ore yielded about sixty dollars to the ton—mill process. The machinery being imperfect, they work for the free gold. Helena is about one year old. I like it better than Virginia; there is more life and activity, and is a larger place. Virginia, it is said, numbers between two and three thousand, and this place between three and four thousand inhabitants. This town appears to be the center of important placer mines, it being surrounded by them at a greater or less distance. There are several quartz mills built and being built near here, one only that is at work, and yields every week from fifteen hundred to two thousand dollars in gold; the yield per ton I did not learn. There are a number of mills to be erected this year. Having been here so short a time, it is impossible for me to even venture an opinion with regard to the mines of this country, but I think, from what I have seen, that there are very rich mines here, but how extensive they are I do not think any one knows. New discoveries are made every week, and a stampede occurs as often for the new diggings. Gold dust appears to be used as a circulating medium, and both coin and legal tenders are articles of merchandise. The greatest want of this country is responsible expresses; in fact, it appears to be locked up for want of express facilities. Merchants, bankers and others have no way of getting treasure out of the country except by private hands, or take it themselves. Merchants and purchasers of dust have to keep it on hand for months, sometimes, waiting for an opportunity to send it either to San Francisco or to New York overland. Sometimes several unite, procure a small safe or box, fill it with dust and send it to St. Louis by an ox train, or down the Missouri river by a boat. Either way it takes a long time to reach its destination. The merchants of San Francisco are making an effort to divert the trade of this Territory to their city. I believe if a line of stages were put on the Humboldt route, and Wells, Fargo & Co.'s express carried it over to San Francisco, that all, or nearly all the treasure of this Territory would go that way to San Francisco, and it would have a greater tendency to divert the trade to San Francisco than any move that could be made. The bankers and merchants here all greatly desire to have an express established. The bankers, whose connections are all with New York, say they would make their remittances by way of San Francisco, were there an express to that point by which they could ship their treasure. They would send their bars or dust to San Francisco, dispose of it to the bankers there, and have them place the proceeds to their credit with their New York correspondents. This, it appears to me, would throw the larger part of the treasure of this Territory into the hands of the bankers of San Francisco."

In conversation with the representatives of some heavy St. Louis houses, who are largely interested in freighting to this Territory by the Missouri river, they admitted that the trade of the Territory was upon a balance whether it would go East or West, that whatever party held out the greatest inducements would be certain to get the greater part of it, and that, in their opinion, a responsible express to San Francisco would be almost certain to take it there, for the supply trade would follow the treasure. The agricultural interest of this Territory I do not look upon as important, except as auxiliary to the mining interest, as without the mines they could have no market for their produce; but now they have a home market for everything they produce. Wheat, barley, oats, and all kinds of vegetables, are grown here. It is the best watered country I have seen. There is scarcely a valley through which there is not running a fine, clear stream of water. Timber is plenty on the hills, but is somewhat difficult to get out. I have been amused at times to hear the extravagant expressions used by the people of this Territory in praise of the country and climate. One enthusiastic individual whom I met at the station just after I had crossed the boundary line, in speaking of the climate, said that there were valleys in Montana that were as warm the year round as the levee at New Orleans. I thought that pretty good for the climate of Montana, particularly as you can at this time of the year stand in the middle of any valley and see snow within half a mile on the hills in any direction in which you may cast your eyes. Afterwards, I met another person, (whom I supposed to be, like myself, a stranger in the country, but who, I afterwards ascertained, was one of them,) and was telling him the extravagant expressions used by the first party, in saying that the climate was as warm as New Orleans, when he, with the gravest countenance imaginable, exclaimed: "That is true—no doubt about it!" "Why," said he, "there is a valley a short distance above here where the grasshoppers live all winter!" That story let me out, and perfectly satisfied me as to the climate of Montana. I intended when I passed through that valley to cage a few of those grasshoppers and forward them to Barnum, giving him their history, but as the road I travelled did not go through "that valley," I did not get any grasshoppers. But, jesting aside, the climate is very different from what I expected to find it, and I was agreeably surprised. After crossing the Rocky Mountains and coming down into the valleys of Montana, it is like getting into a very different climate, and is not so cold as it appeared to be on the west side of the divide. The road from Virginia City to this town, for a great part of the way, runs through some beautiful valleys; the road was perfectly level, smooth as a floor, and dusty, at the time I travelled it, 22d ult. The farmers all along were building fences and preparing to cultivate the soil. There will be considerable wheat and barley raised here this season; there are two flouring mills near Virginia City, and several others will be erected in different localities this year. A year ago the rowdies and desperadoes had complete possession of the country, and carried it so high that the people formed a Vigilance Committee, and, from what I can learn, have pretty effectually cleaned out that class, having disposed of about one hundred by hanging. The Committee is still an organized institution, and is a terror to evil-doers. The community is quiet and orderly, no robberies or murders, and if there are, the perpetrators will be sure to hang; in fact, there are very few outrages committed. I expect to leave here in a few days for Confederate Gulch, a very rich mining camp about thirty miles northeast of this, and will return and visit the Blackfoot Mines, about the same distance west of this. The Blackfoot and Deer Lodge countries are said to be very rich in placer diggings. There was quite a stampede to a new discovery on Cow Creek, thirty miles northeast from here.

Nevada.

Austin.—Recent correspondence from Austin to the *Philadelphia Commercial List* states that: "There are now in the course of erection a dozen large fine mills. During the winter but little progress was made upon them; now, however, large forces of workmen are busily engaged dressing the stone, laying the brick, framing the timbers, placing the machinery in proper position, etc., etc. Those already finished are constantly clattering away upon the argentiferous ore. Besides the mills, there are many hoisting works in course of construction—one but a few steps from Main street, just west of the Court House. One has just been set in motion upon the Foster mine, on Central Hill. Upon Lander Hill, as usual, a large amount of work is progressing in the various claims. In the Revenue Extension some fine developments may shortly be expected; Providential at work sinking; Morse struck a new body of ore; Savage taking out large quantities of ore, and producing more bullion than any other mine in the district; the Washington is now raising some splendid ore. During the past week there have been received of crude bullion for assay, at the different establishments in the city, 25,241 ounces. . . . . Lone Mountain is situated some twenty miles southwesterly from San Antonio, near the road to Silver Peak. On account of its barrenness and the supposed scarcity of water, it had generally been avoided by the passing prospector. More than a year ago a party of Mexicans who paid it a visit, exhibited some ore which they had found there rich in copper, but as that metal at present, in a locality so remote from easy and cheap transportation, is of little value, no attention was paid to the discovery. Recently, however, another party visited it, brought some of the ore to Mr. E. E. Riotte, who had charge of the amalgamating department of Hunt's Mill at San Antonio, who assayed it, and found that it contained a large quantity of gold. A district was thereupon organized, and many preparations are now making to erect works for the reduction of the ores. Notwithstanding its look of extreme sterility, an exploration has disclosed that its canons contain considerable water, and that its corrugated sides in many places abound with timber. This mountain is said to be by those who have scaled its sides and reached the summit to be the most lofty of any in the region. A working test of the ore gave the fine yield of two hundred and fourteen dollars in gold, and twenty-three in silver to the ton. A fine salt marsh, forty or fifty acres in extent, lies near its base. From present indications this isolated "Lone Mountain" is likely to prove an attractive feature of the desert. . . . . Hunt's Mill, San Antonio, after a few day's work upon ore from the Lee mine, cleaned up six thousand ounces of bullion. The mill is at present idle, the Lee not being sufficiently opened to furnish a constant supply of ore, as was expected, and as will be the case when properly explored. The mill company is now trying to negotiate with the Liberty Mining Company for a supply of ore—they having several thousand tons at their dump, but I hardly think they will succeed, as the miners, for some reason, are not favorably disposed toward the mill company, on account of supposed favoritism shown at first to the Lee. Mr. Curtis, superintendent of the Macedon Company, is pushing the work of development upon this company's mines ahead with success. A fine mill, I understand, will be erected by this company the ensuing summer." . . . . White Mountain.—The Virginia *Enterprise* says: "J. P. Spaulding and a man named Cahaley, who have been prospecting in the White Mountains, about 50 miles southwest of the Silver Peak District, have discovered and located 16 ledges, varying in size from 3 to 12 feet. They named the new district the White Mountain. Some of the veins exhibit gold without a trace of silver, and others silver without a trace of gold, and others again contain both gold and silver in varying proportions."

Pahranagat.—Recent correspondence to the *Alta* gives the following particulars concerning this District: "I write, presuming that a few items descriptive of this new silver mining camp may be of interest, especially as its early development is identified with the commercial interests of your city, situated as it is near the head of navigation, on the Colorado River, by which way it will always be more accessible to the trade of San Francisco than by any other route. It lies one hundred and thirty miles north of Call's Landing, in the southeastern corner of Nevada, and three hundred miles south of the Reese River district. Quite a rush has already taken place from the districts of Washoe and Reese River to this lately discovered locality, and I have yet to see the man who has been on the ground, and has had experience in quartz, who does not concur in the opinion that there are no more promising mines to be found in Nevada. There are some three incorporated companies, working with New York capital, who have their mills now on the way, and will commence operations at an early day this summer. The discoveries have thus far been confined to a belt of mountains embraced in three miles by about one mile in width. They are steep and precipitous, broken into spurs, and separated by narrow canons, well timbered with cedar and pine. The ledges in many cases may be seen continuous for a quarter of a mile, standing above the ground from six to thirty inches, crowning the tops and rimming the sides of the mountains. The first ledges were struck about a year since. Attention had been previously called to this section as a mineral country by some discoveries made in Meadow Valley, eighty miles east. An Indian, learning from specimens seen in the hands of the miners, brought to them a piece of silver-bearing quartz, taken from what is now known as the Bay State Lode. The first locators here were old and experienced miners, men who fully appreciate the necessity of capital in the development of the wealth which now lies hidden in these mountains. Any one who would bring in a mill and work the ore at a specified percentage, might be sure of reaping a rich harvest. Its situation, just outside the rim of the Great Salt Lake Basin, is a reason for much milder winters than are experienced near by, and a climate most agreeable, unequalled by any for healthfulness. Standing on the highest point of Silver Mountain, near the centre of the mining district, a magnificent view is obtained of the surrounding country. Eastward, twelve miles distant, you see the fertile valley of Pahranagat, distinctly marked by its tall grass. Thirty miles south, embosomed in the valley, and just on the line of Arizona, the lake of the same name spreads its shining waters; a low range of bare and treeless mountains running north and south bound the farther side of the valley, and still farther eastward are the higher and oftentimes snow-clad mountains of Utah, intersected here and there by sage brush deserts, with an abrupt mountain rising now and then from the desert plain. On this side, towards the west, the ground rises gradually for ten miles, when you come to the foot of the mountains where the mines are located. The Valley of Pahranagat is forty miles long, by about one and a half miles wide. It is fertile and well watered by running springs, whose transparent and bubbling waters can no where be surpassed. The lands are all taken up, and much of it will be cultivated this season. Inhabiting this valley are a branch of the Pi-Utes inhabiting Utah Territory. Their range extends to the eastern slopes of the Rocky Mountains, and westward to the Sierras of California. This branch of the tribe are docile and friendly to all miners. They have in the past cultivated some portions of their valley, irrigating their crops from the springs. The stalks of Indian corn and squash vines of last year's growth, still remaining on the ground, give evidence of an abundant crop. Their number is about two hundred. They keep no horses or grazing stock of any kind. The reason is said to be, their more warlike neighbors, the Muddy Indians, who inhabit the Muddy river valley on the south, have, in the past, been in the habit of making thieving raids upon them, carrying off and making captives of their squaws.

Arizona.

A gentleman thoroughly conversant with the business of copper mining, and one of the earliest pioneers in Arizona, asks the *Alta* to publish the following communication, as to the probabilities of obtaining fuel and successfully smelting the rich copper ores of Arizona on the ground: "Since my arrival in San Francisco I have found opinions of Arizona not at all favorable to that country. When I meet any of my

former acquaintances, after the first greeting they generally ask me where I have been. When I tell them, I generally perceive a desire on their part to get away; they look on me with suspicion, as if they thought that I wanted to sell feet. Now I wish to inform all my friends that I'm 'not on it.' Though I have my share of ground, I don't want to sell now, though a year ago I would like to have sold very much. But things get different, you know. Since the Great Central Company have got a smelting furnace up, I hold my copper interest very high. Their furnaces are not very large ones, but as they are only intended to do their own work they answer all purposes, and will prove that larger ones, with the capacity of doing custom work, will be paying institutions. I have heard the subject discussed since I have been here, and I find that people have a very wrong impression. They seem to think that there is no fuel. Now, that is a grand mistake, though any one to look over the vast plains would be very likely to say that there is not wood enough to run 'the machine' a month; but let them go to work cutting and cording up, and they will be astonished, after having got a thousand or two thousand cords put up, to know how it was possible they did it, for, to all appearance, there will be as much timber standing as there was before they commenced work. I know this to be the case, for I have *been there*. That was at the 'Ajo' mine, south of the Gila, ten years ago; and though I was one of the locaters of that mine, I forget the exact number of cords cut, but it was a thousand or more; and the last time I was there, some four years ago, I could not perceive that there was any less trees, and yet that was some sixty miles from any water course, while on the river there is any amount of cottonwood, and besides the great quantities of wood a species of the 'cactus,' that grows in the dry places. Now, my advice to all companies owning claims in the Williams' Fork, Freeman and Iratava districts (copper), and those holding in the Castle Dome, Eureka district (lead and silver), is to go to work and erect furnaces in the districts above named. They need not be afraid. The Great Central has taken the lead, and at their own expense have made the experiment, and they are now proving to those interested in that country that their heads were 'level.' What will work in Arizona will not in all other countries, because almost all the ores there contain their own fluxing properties, and are very easy of reduction." . . . Recent correspondence of the *Bulletin* from La Paz states: "The surveying party sent out from Prescott by Gen. McDowell to explore a road from that place to the Colorado at or near Williams' Fork, have returned to Date Creek, 110 miles east of this place. They report the route as impracticable, without water or grass, cut up with innumerable canons and covered by vast beds of basaltic lava, called by the Mexicans *malpais*. The expedition has proved a failure, and the explorers will now proceed to locate the wagon road from Wickenburg to Fort McDowell. It has been very lively here the past week. Over thirty teams, principally loaded with Government supplies, have left for the interior, and quite a crowd, for this usually dull place, have arrived and departed. Messrs. Borger & Wunderlich, with their families, *en route* for Prescott, together with Messrs. Samson, Moore, Noyes, Sweat and several others arrived from California on the 21st. Mr. Borger has a 10-stamp mill which arrived at the mouth of the river on the 12th, per *Isabel*, intended for some mines in Big Bug district. Messrs. Samson and Moore have two Little Grant engines and crushers (Gardner's, I believe), which arrived here on the opposition steamer *Nina Tilden* on the 20th, and which are also going out to the vicinity of Prescott. The *Nina Tilden*, with a barge in tow, and bringing up 140 tons, arrived here from the mouth of the river in 5½ days—better time than was ever made by the old line. It should, however, in justice be stated that the river is in splendid condition, being four feet above low water mark. Two steamers of the old line are reported on the way up from Fort Yuma. Mr. Reed has left for your city to procure a mill for Tyson, to be erected on the Eureka lode, Walker's Creek, near Prescott. The two mills at Wickenburg were running and doing well. I regret that some of your California quartz miners do not take a trip down here and inspect some of our quartz ledges, for I believe that within a circle of six miles of this town more indications are visible than Grass Valley ever exhibited; and then this, which I have seen, our prospectors say, bears no comparison with the indications and demonstrations—which I have not seen—in the vicinity of Prescott. In copper, there is no question that the mines in the vicinity of Williams' Fork and at Harcorm, beat the world—the great Union Mine included. If any of your prominent copperheads doubt this assertion, let them come down and convince themselves. They can see piles of sacks of ore, guaranteed to average 40 per cent., lying on the bank of the river waiting for a chance of shipment, besides thousands of tons exposed to view in the various mines now opened." . . . We hear of the discovery of a rich gold lead, called the Sonora, said to be the richest mine yet discovered, about eight miles from Prescott. It is said to be from two to three feet wide on the surface, cropping out over five hundred yards in length, and prospecting equally well the whole distance. Near by is a good mill site, with an abundance of timber, water, &c., and good agricultural land.

Oregon.

The Portland *Herald*, referring to the reported discovery of a rich gold bearing vein near Vancouver, says: "We are informed by parties interested, that some of the rock has been tested at the Oregon Iron Works, and a yield of $20 per ton obtained. A specimen exhibited to us yesterday, appears to be burnt quartz, of a reddish color. On a first examination, it might be taken for iron ore, but upon closer scrutiny with a glass, small particles of gold present themselves to view."

Louisiana.

On Petite Anse Island, in the southern part of Louisiana, there is a bed of rock salt covering over one hundred acres, which, during the late war, supplied nearly the whole of the Trans-Mississippi district. Twenty-one million pounds were taken from it in three months. Yet it is reported that but a very small portion of the deposit has been cut away. Immediate steps are now taking to develop the mine.

North Carolina.

Dr. R. P. Stevens of this city has just returned from a brief examination of the mines of North Carolina, and states that he is satisfied that if the mines in that State are judiciously worked, they will yield a handsome profit.

British Columbia.

Exchanges of April 6, states that in the British Columbia Legislative Council a motion to abolish the three-dollar tonnage duties on home products and manufactures was lost; the Cattle Import bill was thrown out. The out put of coal at Nanaimo for March was four thousand tons; shipped, fifteen hundred tons. Miners are said to have reached Lillooet from the Bridge River mines, and reported that they had found a district which prospected on the bars $12 to the pan. The submarine telegraphic cable which is to connect Vancouver Island with Washington Territory has been landed at Esquimalt, and will be laid in a few days from the British Government boat Forward. . . . Most encouraging Big Bend intelligence, says the Victoria *Chronicle*, has been received in a private letter from the head of Shuswap Lake. The letter is from a driver of one of Smith & Ladner's *tabogons*, or dog sleds. He has been through to Columbia River three times during the winter, and on each occasion saw and conversed with miners at the mouth of French Creek. He writes: "All to whom I spoke told the same tale—the diggings are rich and lasting. In some claims the pay is uniform from the surface to the bed-rock. On the bed-rock the gold is coarser than in the upper dirt, where it is frequently fine—not flour gold, but scaly. * * * I saw one miner with $500, which he said he had scraped together during the winter. * * * I saw one of the partners of Lafleur & Co. This company made *hiyou* gold last fall—$18,000 apiece in two weeks after striking pay. He has been down to Colville, and got back with a good deal of trouble from ice and snow. This Frenchman said he wanted one more month to work his claim, and then he'd go home to France. * * * Seymour, (at the head of Shuswap Lake,) is full of people. I hear the town is in the wrong place—new towns usually are. * * * Smith & Ladner have kept people from starving this winter, with their dogs and sleds. Columbia River is frozen stiff across. I went over it twice with my sled. * * * It is drizzling here to-day. I think by the 10th of next month (April?) all the ice and snow will be gone." . . . Mr. Nelson, the Kootenay expressman, says that at Fort Sheppard he saw a party who had been cutting wood for the steamer on the banks of Arrow Lake. They reported ten miles of ice on the Columbia River, above Kootenay Ripple. Several parties at this point spoke highly of the diggings, and were anxious to return to their claims. The river was open here. At Colville there was about one foot of snow on the ground. A great many men were at Colville, preparing to start in the middle of March for Beg Bend. No miners had then returned from below. Mr. Nelson saw the steamboat Forty-Nine lying at Colville; she was being fitted with a hurricane-deck, and is about the size of the old Fraser steamboat Hope. They expected to run as soon as the ice was out of the river. Several Big Bend miners had as high as $2,500, and all the "boys" seemed to be "flush." On the 25th of February a Chinaman was frozen to death at Fort Sheppard. Our informant left Colville on the 1st of March. At Sheppard the supplies were short; but at Colville there seemed to be a good supply of everything. At Fort Sheppard Mr. Nelson saw two men from French Creek, named John Gallagher and John Claxton (both well known in Cariboo), who had taken out of their claims, in only twenty-six days, $6,091 75. They commenced washing pay on the 5th of the month.

Canada West.

We understand that considerable preparations are being made towards the proper development of the Hull iron mines, and bringing their hidden treasures into proper use. An immense smelting furnace is to be erected, and other works introduced which will enable the iron to be successfully and properly brought out. An American company has undertaken to work the mines, and considering the extraordinary per centage which they yield (75 per cent. we believe), there is every prospect of their being in full and paying operation in the spring.

Mexico.

Gold has been found near Santa Fe, and in Ria Arriba county a silver mine has been found which was once worked by the Mexicans, and which has been hidden for years; and near Los Vegas a company under Mr. F. O. Kihlbeng have found, and are now mining, what they report to be a very rich copper lode. The country round about these mines embraces the Sandia Mountains and their spurs, and prospects well for other metals besides copper.

Oil Summary.

Pennsylvania.

The oil market is looking up. Says the *Reno Times* of 3d inst.: Prices took an upward turn on Monday last and have been improving ever since. The producers on the Stevenson Farm, Bennehoff Run and thereabouts have been filling contracts for several days past, and, just at present have but a small stock on hand. The firmness and upward feeling in the market is partially owing to the small amount on hand, and partially to the Report of the Committee on Ways and Means, recommending the repeal of the tax on crude, on or before the 1st of July next, which will have a tendency to induce small producers, at least, to hold on to their oil if possible, and thus save the tax. The shipments to Pittsburgh during the past week have been large, and notwithstanding the heavy receipts prices have advanced a trifle at that point. The following are the closing prices:

At Reno on Platform	$4 75@5 00
Oil City	4 50@4 75
Tarr, Blood and Story Farms	4 00@4 25
Bennehoff Run, (at wells)	3 50@3 75
On Pithole, (at wells)	3 50@3 75
Petroleum Centre	4 00@4 25
Rouseville (on bank or Platform)	4 25@4 50
Boating from Petroleum Centre to Reno	60@75
" " Tarr, Blood and Story Farms	50@60
" " Petroleum Centre to Shaffer	45@50
" " Rouseville	25@35
" " Reno to Pittsburgh	50@00
Transportation from Reno to Cleveland	75
" Empties from "	25

West Pithole.—The recent strike on the National Oil Company's tract, on what is known as the Snedaker Farm, two miles above the mouth of West Pithole, once more directed attention to this quarter, and a considerable number of new wells are now going down along its course. Omitting these, however, and starting from the mouth of the stream the first producing well which is found is called the Greer Well. It was bored last summer, and subsequently abandoned on account of the immense attractions offered on the other branch of the stream. These great expectations having subsided, testing was recently renewed, and although the present product of the well is small, the promises are excellent, and the oil already produced of a very fine quality indeed. Proceeding upwards the next productive point is the Pitcher Well, on the National Oil Co.'s territory, which is said to produce 150 barrels per day, and which is probably pumping about one hundred barrels. The same company have two other wells in an advanced state, both of which will shortly be tested. Between the Greer Well and the Pitcher there are at least a dozen new wells going down, about half of which will be ready for testing in a fortnight from the present time. One of the principal operators on this territory is Mr. Jonathan Watson, of Titusville, whose experienced choice of territory is no small recommendation to its general prospects of success.

Michigan.

The oil excitement at Almont, Lapeer county, is running high. A company from Port Huron has been organized there to test the oil territory in the town of Dryden, seven miles west. There have also been five companies organized, who have leased several hundred acres for oil purposes. It is now thought by those who profess to be competent to judge that there are sure indications of oil in the regions above named. Professor Winchell, of Michigan, says in a letter: "The Lake Superior sandstone occupies a lower geological horizon than any formation which has hitherto afforded petroleum in productive amounts, though nearly all transformations have been known to afford it in quantities large or small. I am not prepared, however, to express a theoretical opinion entirely adverse to the prospect of success, even in the Lake Superior sandstone. Oil was first obtained in large amounts in the Chemung and Portage sandstones of Pennsylvania—next in the older Hamilton group of Canada—then at the bottom of the coal measures in Western Virginia and Ohio, and lastly in the lower silureans in Kentucky and Tennessee. There can be no theoretical reason why it should not occur a little lower still at Lake Superior. If the surface indications are such as you state, I incline to the opinion that there are reasons for cautious explorations for oil. In your district are some dark bituminous shales, which, if underlying the porous sandstone, sustain the same relation to the oil-containing rocks as the black shales of Pennsylvania, Kentucky and Tennessee, and I should not be at all surprised if oil should be obtained there by you. Nevertheless, it must not be forgotten, that the geological conditions are somewhat different from those of any known oil region, and expectation should not be permitted to run high."

Alabama.

A private letter from New Orleans states that: "Oil has been struck by parties who were boring for it at Gadsden, on the Coosa river, and that the whole country thereabouts was in a state of intense oleaginous excitement. Several prominent oil-promising regions of our own State have recently changed hands at high figures, and already the work of boring has been commenced near Lake Charles, on the Calcasieu river, where a sandstone formation was struck at a depth of one hundred and twenty feet. A considerable number of oil springs have been found in the same vicinity and in the interior of the State. A valuable spring has also been discovered within two miles of Red river, above the raft, and the prospects on the Ouachita river, in Arkansas, are extremely flattering."

California.

The Los Angeles *News* of April 6th has the following: "Three barrels of crude oil are procured daily from three springs near San Fernando, which are under the superintendence of Rushmore. We are informed that arrangements are being made that will largely increase the amount collected from the springs. Water and oil continue to flow from the well of the Pioneer Oil Company, near this city. We have been informed that a new company will commence boring for oil, in the vicinity of this city, in a few days."

Canada West.

Professor C. W. Wright in an article upon the Petroleum Wells of Canada and Kentucky says: "The oil lands of Enniskillen county, Canada West, are located in the Devonian formation. Those of the upper Cumberland have, in the main, the same geological position. The surface oil of both is, as a general expression, of the lubricating quality. After descending for a few

hundred feet, in both regions, the oil is of the quality known as burning fluid. In both regions more or less oil-gas is evolved. Salt water is frequently encountered in both localities. In each of the localities flowing and pumping wells have been obtained; and finally, in both localities the fossiliferous and lithological character of the formations present indubitable evidences of the fact that both of these remarkable regions were formed at the same period in the history of the world. In Canada, as a general fact, the operator has a greater vertical depth upon which to operate. There can be no question but that the operator can rely upon at least eleven hundred vertical feet, and a lateral extent nearly, if not quite equal to that of the renowned Cumberland oil lands of this State and those of Tennessee. As to the vertical extent, or depth, of the oil formations of the higher Cumberland, we are not fully prepared to speak. Those of Wayne and Russell counties, Kentucky, have a vertical advantage, as a general thing, over those in Cumberland county, in the same State. Still there can be no question but that it will require many years to exhaust the oil reservoirs in Cumberland county, even should the flow be equal to the expectations of the most sanguine."

GOLD.

COMPANY.	SHARES.	STOCK.	SITUATION OF MINE.	SECRETARY & PLACE OF BUSINESS.
Acadia			Nova Scotia	H. W. Nelson, 24 City Ex., Boston.
Albion		$ 300,000	Halifax, Nova Scotia	H. W. Nelson, 24 City Ex., Boston.
Alps	100,000	250,000	Illinois Central Dist., Col.	J. Stanton, Jr., 25 Nassau, N. Y.
Ascot	50,000	5,000,000	Sherbrook, C. E.	G. H. Morrison, 17 Nassau, N. Y.
Atlantic				Chas. Barett, 13 Doane, Boston.
Atlantic & Pacific	50,000	5,000,000	Humboldt T., Humboldt co.	J. N. Sewall, 8 Broad, N. Y.
American	100,000	5,000,000	Gregory Dist.	
American Flag	60,000	600,000	Nevada Dist., Col.	H. Foles, 12 Pine, N. Y.
Astor	200,000	1,000,000	On Comstock Lode	J. Chapman, 71 Broadway, N. Y.
Baltic			Colorado	New York.
Bates & Baxter			Colorado	New York.
Bay State	200,000		Colorado	Lem'l Bangs, Boston.
Benton	100,000	500,000	Colorado	F. W. Capen, 44 Ex. Pl., N. Y.
Black Hawk	50,000	5,000,000	Gilpin co., Col.	D. Littlejohn, 81 John, N. Y.
Beacon		500,000	Halifax co., Nova Scotia	J. B. Post, 20 Ex. Pl., N. Y.
Bobtail	100,000	1,000,000		J. Stanton, Jr., 25 Nassau, N. Y.
Briggs	10,000	1,000,000	Gilpin co., Col.	D. Littlejohn, 81 John, N. Y.
Bradshaw	250,000	1,000,000	Yavapai County, Arizona	O. H. Conover, 219 Dock st., Phil.
Burroughs	100,000	1,000,000		L. Bangs, 22 Pine, N. Y.
Bullion	200,000	1,000,000	Bannock, Montana	55 Liberty, N. Y.
Bullion Consoli.	300,000	300,000	Summit and Clear Creek, Col.	J. P. Whitney, 19 Lindall, Boston
Calvin	200,000	1,000,000	Clear Creek co., Col.	J. P. Whitney, 19 Lindall, Boston.
Canadian				A. Call, 7 Phœnix B'l'g, Boston.
Chem. Gold&S. R				64 B'way
Ch. Un. Gold Co.				66 B'way
Chebucto	100,000	500,000	12 miles from Halifax	J. E. M. Gilley, Boston.
Clarendon		500,000	5 miles from Halifax	H. Doane, 41 State, Boston.
Chase	5,000	500,000	Colorado	W. E. Lawton, 81 John, N. Y.
Central Gold M.	20,000	1,000,000	Central City, Col.	L. Bangs, 22 Pine, N. Y.
Central Mining	200,000	1,000,000	Colorado	46 Exchange Pl., N. Y.
Chandiere	100,000	500,000	5,000 A Famine Riv. C. E.	Wm. B. Fowle, Boston.
Cobden	100,000	1,000,000	Idaho	New York.
Colonial				W. N. Ely, 7 Trav'r B'l'g, Boston.
Colorado Boston			Colorado	R. C. M'Laughlin, 60 State, Bos'n.
Colorado N. Y.			Colorado	12 Pine, N. Y.
Coleman			Colorado	New York.
Columbia	30,000	3,000,000	Austin City, Nevada	10 Pine, N. Y.
Consuelo Gold				31 Pine.
Consol Gregory	50,000	5,000,000	Gregory Dist., Col.	30 Pine, N. Y.
Cook & Kimball	1,000	150,000	Colorado	W. W. Baldwin, 35 Wm., N. Y.
Copalinshee	250,000	5,000,000	Parke co., Col.	J. C. Stocker, 137 B'way, N. Y.
Corrisanuee	100,000	1,000,000	Colorado	New York.
Commonwealth			Nevada	Philadelphia.
Corrydonn	100,000	2,500,000	Gilpin co., Col.	46 Exchange Pl., N. Y.
Continental	20,000	2,000,000	Gregory Dist., Col	115 Liberty, N. Y.
Central Gold	200,000	1,000,000		L. Bangs, 22 Pine, N. Y.
Dauphin & Colo.	200,000	1,000,000	Colorado	John S. McMullin, 423 Walnut, Pa.
Day & Bushnell	300,000	3,000,000	Colorado	T. Chalmers, Jr., 20 Ex. Pl., N. Y.
De Lery		10,000,000	Chaudiere Valley, Canada E.	J. M. Winchell, 72 Cedar, N. Y.
Denver	50,000	1,000,000	Gilpin & Clear Creek, Col.	J. Wadsworth, 61 Cedar, N. Y.
Devonshire				W. Stockbridge, 74 Fr'klin, Bos'n.
Downieville	300,000	300,000	Colorado	J. C. Harriott, 70 Wall, N. Y.
Dorset			Chaudiere River, C. E.	F. McJimsey, 59 Wm., N. Y.
Eagle	100,000	1,000,000	Gold Dirt Dist., Col	J. P. Davies, 81 John, N. Y.
East Bannack	100,000	200,000	Bannack City, Montana	J. Callender, 48 Ex. Pl., N. Y.
Eldorado	500,000	2,500,000	San A Dist., 9 miles of Austin	208 S. Fourth, Phila.
Empire	250,000	5,000,000	Clear Creek, Col	H. K. Gates, 191 B'way, N. Y.
Empire Mill & M				O. F. Griffin, San Francisco.
Enriquetta			Arizona	New York.
Esperanza		500,000	Star D., Humboldt co.	117 Broadway, N. Y.
Etna	50,000	500,000	Nevada Dist., Col.	C. W. Bryant, Boston.
Excelsior	30,000	300,000	Central City, Col.	J. Weatherbee, Jr., 11 P. B'g, Bos.
Famine Falls	100,000	1,000,000		D. L. Dodge, 30 B'way, N. Y.
Garrisons	100,000	5,000,000	Colorado	C. G. Mease, 29 William, N. Y.
Gem	25,000	1,200,000		H. K. Gates, 191 B'way, N. Y.
Georgetown			Colorado	New York.
Gilbert River				C. F. Jackson, 18 Phe'x B'g, Bos'n.
Gilpin				C. W. Galloupe, 76 State, Boston.
Golconda	$ 250,000	5,000,000		J. H. Sherman, 19 Broad, N. Y.
Gold Field				C. B. Cowling, 39 Kilby, Boston.
Gold Rock	5,000	500,000	Central City, Colorado	R. M. Lockwood, 113 Wall, N. Y.
Gold River				W. H. Cheesman, 9 Central, Bos'n.
Gold Hill	50,000	500,000	Colorado	W. T. Eustis, Boston.
Gold Mountain	600,000	6,000,000	Clear Creek Co., Colorado	25 Nassau, New York.
Gold Min'g of Col	50,000	5,000,000	Colorado	E. Latham, 23 William, N. Y.
Golden Gate	60,000	600,000	Sum. Highl'd&Mill C. D., Mon	J. Morse, Jr., New York.
Gunnel Central			Colorado	70 Broadway, N. Y.
Gunnel Gold	300,000	3,000,000	Colorado	F. E. Roelfson, 78 & 80 B'way, N.Y.
Gregory	20,000	1,000,000	Colorado	Thos. Wildes, 17 William, N. Y.
Granada	50,000	125,000	Colorado	J. Stanton, Jr., 25 Nassau, N. Y.
Great Western	60,000	600,000	Russel Dist., Col.	E. Kemeys, 70 Broadway, N. Y.
Gunnel Gold	100,000	1,000,000	Colorado	F. E. Roelofson, 74 B'way, N. Y.
Halifax				A. Case, 7 Phœnix B'l'g, Boston.
Harmony				Demas Barnes, 21 Park Row.
Her'it'ge Ranch	30,000	300,000	El Dorado, Cal.	
Hope	80,000	2,000,000	G'ld Dirt Lode, Gilp. co., Col.	J. P. Davies, 81 John, N. Y.
Holman	150,000	300,000	Clear Creek co., Col.	J. O'Neill, 23 Wm, N. Y.
Humboldt	100,000	500,000	Colorado	78 B'way.
Idaho	100,000		Montana	5 Pine, N. Y.
Invincible				
Isaac's Harbor	100,000	500,000	Isaac's Harbor, Nova Scotia	W. F. Shirley, 137 B'way, N. Y.
Isle Royale				44 Ex. Pl.
Kansas Colorado	100,000	1,000,000	Colorado	J. G. Greenlies, 111 B'way, N. Y.
Kent				G. H. Wyman, 19 Phe'x B'l'g, Bos.
Kip & Buell	100,000	200,000	Colorado	J. C. Harriott, 70 Wall, N. Y.
Knickerbocker	100,000	1,000,000	Colorado	F. Avery, 74 B'way, N. Y.
La Crosse	100,000	$1,000,000	Nevada Dist., Colorado	H. Fales, 12 Pine, N. Y.
Liebig	200,000	1,000,000	Colorado	
Lake Major	12,000	$600,000	Nova Scotia	Fred. Franck, 113 Water, N. Y.
Mariposa Gold	100,000	10,000,000	Bear Valley, Cal.	G. W. Farlee, 34 Wall, N. Y.
Mammoth	50,000	500,000	Colorado	J. Jarrett, 41 Liberty, N. Y.
Manhattan	100,000	1,000,000	Colorado	W. R. Lothrop, 172 B'way, N. Y.
Massachusetts	240,000	1,200,000	Gilpin co., Col.	W. D. Briggs, 11 Phe'x B'l'g, Bos.
Merchants	30,000	600,000	Alturas co., Idaho	Jas. K. Selleck, 157 B'way, N. Y.
Metropolitan				
Mountain Pride	100,000	1,000,000	B'r C'k, St. Bse., Idaho	29 Pine, N. Y.
Montague	50,000	500,000	near Halifax, Nova Scotia	C. B. Cowling, 39 Kilby, Boston.
Mount Alpine			Griffith Dist., Clear C'k, Col.	J. B. Randol, N. Y.
Mount Vernon	500,000	5,000,000	Mt. V. & Mam'th Dist., Nev.	25 Park Row, N. Y.
Mount Vista	50,000	500,000		J. Chapman, 23 Nassau, N. Y.
Montana	100,000	400,000	Nevada, Ills., Greg'y, Col.	A. L. Guerber, 54 Wm, N. Y.
Montezuma	100,000	500,000	Colorado	F. B. Webster, Boston.
Montrose	100,000	1,000,000	Clear Creek co., Col.	C. A. W. Sibley, 80 B'way, N. Y.
Morning Star	5,000	5,000,000	Owyhee co., Idaho	137 B'way, N. Y.
Mexican Pacific	100,000	10,000,000	Mexico	J. Mackie, 88 Wall, N. Y.
Melones & Stan			Calaveras co	606 Mont, San Francisco.
National	300,000	3,000,000	on So. Boulder C'k, Col.	31 School, Boston.
Nevada Star				25 Pine, N. Y.
New England	50,000	150,000	Black Hawk, Col.	J. Weatherbee, Jr., Boston.
New Mexico			near SantaFe	
New Gregory				W. A. Kent, 144 State, Boston.
New York City	50,000	5,000,000	G'ld Canon D't, Land. co. Nev.	10 Pine, N. Y.
New York Dist.	50,000	500,000	Austin, N. Y. Dist., Nevada.	71 B'way, N. Y.
New York of Col	100,000	1,000,000	Colorado	F. E. Roelfson, 74 B'way, N. Y.
N. Y. & Nevada	100,000	1,000,000	Nevada	J. J. Osborn, 30 Pine, N. Y.
N. Y. G Min'g	100,000	1,000,000	Colorado	F. E. Roelofson, 78 & 80 B'way.
N. Y. & Eldor'do			Nevada	106 B'way, N. Y.
N. Y. & Idaho			Idaho	180 Chatham, N. Y.
N. Y. & Santa Fe			Nevada	New York.
N.Y. & Owyhee		1,000,000	Owyhee co., Idaho	4 Pine, N. Y.
N. Y. & Oro Fino	10,000	1,000,000	Owyhee co., Idaho	137 Broadway, N. Y.
N. Y. & Reese R			Nevada	New York.
N. Y. & Washoe			Nevada	New York.
North Clear C'k	100,000	1,000,000	Gilpin co., Col.	J. Francis, 80 B'way, N. Y
Nova Scotia				Chas. Barrett, 13 Doane, Boston.
N. Y. & Nova Sc	100,000	1,000,000	Tangier, Nova Scotia	Jos. E. Gay, 3 Hanover, N. Y.
National S Min'g		1,500,000	Owyhee co., Idaho	115 B'way, N. Y.
Occidental	5,000	500,000	Nevada & Ills. C. Dist., Col.	100 B'way, N. Y.
Oldham				Chas. Barrett, 13 Doane, Boston.
Ophir	62,500	625,000	on Comstock Lode, Nevada.	Moses A. Hopnock, 47 Ex. Pl.
Pacific	40,000	4,000,000		24 Pine, N. Y.
People's	100,000	5,000,000	Alpine & Sierra cos.	23 Nassau.
Peck				E. R. Sawyer, 144 State, Boston.
Perigo	60,000	3,000,000	Ind. Dist., Gilpin co., Col.	J. W. Stratton, 90 B'way, N. Y.
Pine Mountain	30,000	3,000,000	Pine Mountain Dist., Nev.	F. K. McCully, 157 B'way, N. Y.
Pioneer & Inskip			Buena Vista Dist., Nevada	15 Nassau, N. Y.
Phila. & Color'do	20,000	1,000,000	Central City, Col.	E. W. Clark & Co., Phila.
Phelps & Gilm're	200,000	1,000,000	Colorado	W. H. Stendervant, 23 Nassau.
Pleasant Valley	125,000	1,250,000	Colorado	J. S. Lyon, 69 Wall, N. Y.
Pontiac	50,000	1,000,000	Ill. Con. M Dist., Col.	R. H. Rickard, 19 Nassau.
Prescott	100,000	1,000,000	Central Arizona	69 B'way, N. Y.
Prince Albert				W. H. Cheesman, 9 Central, B'stn.
Quaker City			In4't D't, G'd D't City, Col.	103 South Third, Phila.
Quartz Hill	40,000	100,000	Nevada Dist., Col.	J. A. Tyler, 29 Wall, N. Y.
Rancho C'k	10,200	1,200,000	Pine Wood Dist., Nevada	18 Broad, N. Y.
Realito		1,600,000	G'd Hill D., Storey co., Nev.	117 B'way, N. Y.
Reese River Pr'l G. & S.	100,000	1,000,000	AmadorDist., Landor Co., Nev	Elijah Alliger, 67 Wall, N. Y.
Renfrew				W. Stockbridge, 74 F'klin, Bos'n.
Republic	15,000	1,500,000	Amador D., Lander co., Nev.	67 Exchange Pl., N. Y.
Rocky Mountain	50,000	500,000	Grey & Empire Dists., Col.	E. L. Belles, 49 Ex. Pl., N. Y.
Reciprocity	100,000	1,000,000	Canada East	B. F. Grant, Jr., 71 B'way, N. Y
Scorpion			Virginia City, Nevada	617 Clay, San Francisco.
Sherbrooke	100,000	1,000,000	Sherbrooke, Canada East	F. Schumacker, Cliff, N. Y.
Silas Wright	60,000	600,000	Amador D., Lander co., Nev.	18 Wall, N. Y.
Silver State	100,000	500,000	Humb't Starr, Pr. R. D. Humb't co., Nevada	R. S. Miller, 49 William, N. Y.
Silver Wave	300,000	3,000,000	Resee riv., Lander co., Nev.	Emmet Blair, 243 B'way, N. Y.
Smith & P'rmlee	125,000	2,500,000	Colorado	G. A. Lathrop, 4 Broad, N. Y.
Smithfield	100,000	400,000	Gilpin Co., Col.	A. F. Baum, 48 Broad st., N. Y.
Spanish		3,000,000	La Plata, Churchill co., Nev.	228 South Third, Phila.
So. Clear C'k			Colorado	Canastota, N. Y.
Starlight Lode	50,000	500,000	P'ville, El Dorado co.	
Star of Color	200,000	2,000,000	Colorado	J. N. Powers, 22 Pine, N. Y.
Standard	50,000	500,000	Gregory Dist., Col	T. A. Mitchell, 12 Wall, N. Y.
Steptoe	20,000	2,000,000	G'd Can., Lander co., Nev.	137 B'way, N. Y.
Sterling City		1,200,000	Colorado	New York.
Stewart	100,000	500,000	Colorado	C. Durham, 21 Exchange, Boston
Suffolk				Carlos Cobb, 22 William, N. Y.
Southard				Wm. Wallace, 11 Doane, Boston.
Stafford				C. E. Jackson, 15 Central, Boston
Tascher	100,000	1,000,000	Colorado	F. J. Wright, 8 Wall, N. Y.
Texas	50,000	500,000	Black Hawk City, Colorado.	Wm. E. Parish, 155 B'way, N. Y.
Trimble			San Antonio, L. Cal.	San Francisco.
Union	240,000	12,000,000	Colorado	F. A. Potts, 110 B'way.
United States	75,000	1,500,000	Colorado	J. P. Stevens, N. Y.
University				31 Nassau, N. Y.
Victoria				W. H. Chessman, Central, B'stn.
Virginia City	250,000	250,000	Nevada	J. B. William, 78 & 80 B'way.
Wauba Yuma	600,000	6,000,000	Arizona	35 William, N. Y.
Waddingham	24,000	600,000	Alturas co., Idaho	Jas. K. Selleck, 104 Wall, N. Y
Waverley				J. Leighton, 97 State, Boston
Windsor Gold M	10,000	100,000	Colorado	25 William, N. Y
Wilson & Cass			Colorado	New York.

LEAD.

COMPANY.	SHARES.	STOCK.	SITUATION OF MINE.	SECRETARY & PLACE OF BUSINESS.
Amenia	$ 100,000	500,000	Duchess co., N. Y.	G. Furman, 77 Cedar, N. Y.
Bucks County	40,000	200,000	Bucks co., Pa.	R. R. Sinclair, 53 Ex. Pl., N. Y.
Canada	50,000	250,000	Canada	Alb. Case, 7 Phe'x B'l'g, Boston.
Champion				New York.
Clute	110,000	550,000	Macomb T. St. Law. co., N. Y.	Rev'l'y S. Merrill, 42 Cedar, N.Y.
Continental	200,000	500,000	Martinsburg, N. Y.	J. Sickles, 57 Ex. Pl., N. Y.
Eastport	100,000	1,000,000	Eastport, Me.	R. Vose, 54 William, N. Y.
Erie	40,000	4,000,000	Orange co., N. Y.	Ogden Gaul, 25 Pine, N. Y.
Hampton	100,000	500,000	Hampshire co., Mass.	C. W. Bryant, Boston.
Jefferson				65 Wall, N. Y.
King's Hill	10,000	50,000		W. L. Haskin, 180 B'way, N. Y.
Lake Superior	200,000	1,000,000	Secs. 5 & 36 T., 49 & 50 R., 28 & 29 Marquette co, Mich.	C. L. Mather, N. Y.
Lancaster	50,000	250,000	Lancaster co., Pa.	J. R. Sibley, 35 Pine, N. Y
Macomb	110,000	550,000	Macomb T. St. Law. co., N. Y.	C. E. Scofield, 42 Cedar, N. Y.
Maine	50,000	500,000	Eastport, Me.	A. L. Butler, 54 William, N. Y.
Mineral Point	100,000	500,000	St. Lawrence co., N. Y.	H. W. Warren, 60 City Ex., B'stn.
Morgan	100,000	500,000		W. Williams, 42 Cedar, N. Y.
Mount Hope	80,000	200,000	Mt. Hope, Orange co., N. Y.	W. Williams, 24 Pine, N. Y.
New Hampshire	100,000	500,000	New Hampshire	W. A. Farrar, 71 B'way, N. Y.
N. Y. & Boston		1,000,000	Chester co., Pa.	S. M. Cockein, 22 William, N. Y.
Oswegatchie				24 Pine, N. Y.
Owens Lake	50,000	250,000		C. W. Bond, 78 Cedar, N. Y.
Phœnix	50,000	250,000	Columbia Co., N. Y.	G. W. Butler, 54 William, N. Y.
Placentia Bay	200,000	1,000,000	Newfoundland	J. Simpkins, 29 Wall, N. Y.
Ramsay	20,000	500,000	Township Ramsay, C. W.	C. W. Bryant, Boston.
Rochester	200,000	500,000		J. A. Ferguson, 8 Wall, N. Y.
Rossie				24 Pine, N. Y.
Rosa Clara	100,000	1,000,000		H. Lathrop, 25 Nassau, N. Y.
St. Clair	100,000	1,000,000		H. R. Hawkins, 25 Nassau, N. Y.
St. Joseph	100,000	1,000,000		W. Williams, 24 Nassau, N. Y.
Shawangunk	100,000	500,000	Mt. Hope, Orange co., N. Y.	E. P. Ackerman, 48 Pine, N. Y.
Sussex	125,000	625,000	Sparta Town, Sus'x co., N. J.	F. H. Stow, 57 Cedar, N. Y.
Walkill			Orange co., N. Y.	W. A. Scott, 170 B'way, N. Y.
Warren			Warren, Grafton co., N. H.	J. S. Christie, 100 B'way, N. Y
White Mountain			New Hampshire	111 B'way, N. Y.

SILVER.

COMPANY.	SHARES.	STOCKS.	LOCATION OF PROPERTY.	SEC'Y AND PLACE OF BUSINESS.
Amazon	25,000	$250,000	Nevada	W. L. Louther, 134 So. 3d, Phil.
Argentine	50,000	250,000	Argentine Dist., Colorado	D. L. Demmon, 134 State, Boston
Arizona	100,000	10,000,000	22 m W of Tubac, Arizona	J. B. Randol, 32 Pine st., N. Y
Astor	200,000	1,000,000	On Comstock Lode, Nev	J. Chapman, 71 Broadway, N. Y.
Atlantic & Pac.	50,000	1,000,000	Humboldt T. Hum't Co, Nev.	J. N. Sewall, 8 Broad st., N. Y.
Big Smoky	20,000	600,000	Smk'y Hill, Lander Co. Nev.	
Black Eagle	7,000	350,000	Carson, Owyhee co., Idaho	O. D. Gardner, 40 Maiden lane.
Bullion	200,000	1,000,000	Bannock, Montana	55 Liberty street.
Bush	50,000	500,000	Austin City, Nevada	176 Chambers st., N. Y.
Combination	50,000	50,000	Nevada	J. W. Stoute, Jr., 155 B'way, N.Y
Colorado Con.			Cedar Hill Nevada	New York.
Columbia	30,000	3,000,000	Austin City, Nevada	J. E. Smith, 10 Pine street, N. Y.
Conn. & Nevada	120,000	1,250,000	Averill, Churchill Co. Nev	47 Liberty street, N. Y.
Commonwealth	200,000	2,000,000	Gold Hill, Nevada	80 B'way, N. Y.
Cosmos	10,000		Awyhee Co, Idaho	137 Broadway, N. Y.
Del Norte & S'br.			Lower California	New York.
Durango	5,000	500,000		W. R. Garrison, 73 W'm st., N.Y.
East Bannack	100,000	200,000	Bannock City, Montana	J. Callender, 49 Ex. P., N. Y.
Empire G. & S.	100,000	10,000,000	Bodie Bluff, Mono	H. R. Gates, 191 Broad'y, N. Y.
Empire and Silver State	20,000	2,000,000	Reese River Dist., Nevada	57 B'way, New York.
Eldorado	500,000	2,500,000	San A 90 m s of Austin, Nev	208 South Fourth street, Phila.
Essex & Diadem	125,000	2,500,000	Sierra dis, Humboldt C. Nev.	A. R. Wetmore, 81 Vosey st. N.Y.
Franklin			Nevada	Philadelphia.
Gem	200,000	1,200,000		H. K. Gates, 191 B'way, N. Y.
Globe	100,000	500,000	Austin, Nevada	J. W. Brazier, 26 Pine, N. Y.
Good Hope	20,000	1,000,000	40 m S of Austin, Nevada	80 Broadway, N. Y.
Huron			Montano	New York.
Incas	300,000	300,000	Summit co., Colorado	J. P. Whitney, 19 Lindall, Bost.
Knickerb'r and Nevada	20,000	2,000,000	Union Dis. Nye Co, Nev	H. R. Shotwell, 70 Cedar, N. Y.
Lander County			Nevada	New York.
Lincoln		1,000,000	Owyhee Co, Idaho	80 Broadway, N. Y.
Lw'r California	40,000	2,000,000	North Part of Lower Cal.	55 William street, N. Y.
Madison	30,000	3,000,000	Nevada	W. W. Perkins, 71 Bl'way, N. Y.
Macedon			Nevada	Philadelphia.
Manhattan			Nevada	New York.
Merchants	30,000	600,000	Alturas Co. Idaho	157 Broadway, N. Y.
Metropolitan	15,000	1,500,000	Austin City, Nevada	158 Broadway, N. Y.
Morning Star	5,000	5,000,000	Owyhee County, Idaho	137 Broadway, N. Y.
Mount Vernon	500,000	5,000,000	Mount Vernon & Mammoth District, Nevada	New York.
Mount Vista	50,000	500,000		J. Chapman, 71 Bway, New York.
National	15,000	1,500,000	Owyhee Co. Idaho	115 Broadway, N. Y.
Nevada	100,000	300,000	Mountain Wells, D. Ch. co. Nev	323 Walnut street, Phila.
Nevada	120,000	1,200,000	Nevada	E. L. Bolles, 49 Ex. Place, N. Y.
New Y'k & Ione	20,000	2,000,000	Ione City, Nye Co., Nev.	71 Broadway, N. Y.
New York				78 Broadway, New York.
New York City	50,000	5,000,000	Gold Can Dist. Lander Co. N	10 Pine street, New York.
New Y'k Dis'ct	50,000	5,000,000	80 m f'm Austin, N. Y. Dis. Nevada	S. A. Hopkins, 71 Broadway, N Y
New Y'k & Nev.	10,000	1,000,000	Nevada	J. J. Osborn, 30 Pine street, N. Y.
N. Y. & Owyhee		1,000,000	Owyhee Co. Idaho	6 Nassau street, New York.
N. Y. & O. F. G. & S. M.	10,000	1,000,000	.....do..... .....do.....	137 Broadway, New York.
N. Y. and Silver Peak	20,000	2,000,000	Nye County, Nevada	R. C. Root, 74 Broadway, N.
N Y. & Santa Fe			Nevada	New York.
N. Y. & Washoe			Nevada	New York.
North Am. M'g.			Nevada	Philadelphia.
Ocean Transit		1,500,000	Lower California, Mexico, On Comstock Lode, Nev.	24 Pine, N. Y.
Ophir				
People's	100,000	500,000	Alpine & Sierra Counties	8 Pine street, New York.
Phœnix	200,000	2,000,000		48 East 26th street, New York.
Picacho	50,000	2,000,000	Arizona	T. H. Perkins, New York.
Pine Mount'n	30,000	3,000,000	Pine Mount'n Dist. Nev. Buena Vista Dis, Austin, Nev.	F. K. McCulley, 100 Bl'wy, N. Y
Pioneer and Inskip				15 Nassau street, New York.
Prescott	50,000	2,500,000	Arizona	T. H. Perkins, New York.
Republic	15,000	1,500,000	Amador, D Lander Co. Nev.	67 Ex. Place, New York.
Revenue Exten.	50,000	500,000	Lander County, Nevada	W. L. Kite, 142 South 4th, Phila
Rosario and Carmen	5,244	1,480,000	Sinaloa, Mexico	San Francisco,
Rough Diamond				
San Antonio	60,000	3,000,000	Arizona	C. Lamson, 21 Nassau st., N. Y.
Seminole	7,000	1,500,000	Unionv., Humboldt Co., Nev.	L. G. Wilkin, 171 B'way, N. Y.
Silas Wright	60,000	600,000	Amador, D Lander Co. Nev.	18 Wall street, New York.
Silver Hill	40,000	1,000,000	Nevada	J. C. Hitchcock, 62 B'dway, N.Y.
Silver Series		1,000,000	Lander Co., Nevada	W. B. Rogers, 119 B'way, N. Y.
South Boise, T. Co	200,000	2,000,000	Alturas Co., Idaho	
Star Hill	20,000	1,000,000	Nevada	
St'h Cl'k Crk			Colorado	Canastota, New York.
Stephenson	500,000	1,000,000	18 m E of Ft. Fillmore	A. S. Kellogg, 22 Pine, New York
Steptoe	20,000	2,000,000	Gold Can. Lander Co. Nev.	19 Pine, New York.
Sterling City		1,200,000		New York.
Tarshish	12,000	1,200,000	Toryabee Range, Un. D., Nev	H. S. M'Collum, 109 B'way, N. Y
Tempest	200,000	1,000,000		L. Bangs, 22 Pine street, N. Y.
Trumbo			San Antonio, Lo'wr Cal.	San Francisco.
Toiyabee	50,000	5,000,000	Pine W'd, Mn'tn Dis. Nev.	J. M. Brown, 157 B'wy, N. Y.
Union & El D'o.	100,000	1,000,000	Mogul Silver Mn'tn	
Upper Missouri.		100,000	Montana	107 Broadway.
Wamba Yuma.	600,000	6,000,000	Arizona	35 William street, New York
White Mountain S. & L.			New Hampshire	111 Broadway, New York.

COPPER.

COMPANY.	SHARES.	CAPITAL.	SITUATION OF PROPERTY	SEC'Y., AND PLACE OF BUSINESS.
Adventure,	20,000		Parts of Sections 35, 36, T. 51, N Range 38 W,	W. H. Smith, 51 Ex. Pl, N. Y.
Etna,	20,000		1226 A in Secs. 6, 7, 18, T. 58, N R 25, 37 Keweenaw co. Mich.	B. A. Hoopes, 324 Walnut St., Phil.
Alb'ny & Bost'n,	20,000		Secs 7, 8, 9, 10, 11, T. 55, R. 33	Fred. Beck, 43 City Ex., Boston.
Anita,	20,000		Del Norte co., California,	8 Wall St., N. Y.
Algomah,	20,000		W½ S. 39, T. 51, R. 37,	L. W. Clark, Boston.
Allouez,	20,000		Town 57, R. 32, Sec. 31,	Horatio Bigelow, Boston.
Amy gil'yd'l.,	20,000		E½ Secs. 16, 21, T. 58, R. 30, NW¼ Sec. 5, T. 57, R. 31, 160 A.	F. H. Womrath, 324 Walnut St., Philadelphia.
Arcadian,	20,000		NW¼ Sec. 20, T. 57, R. 33, 160 A,	C. P. Dixon, 48 Pine St. N. Y.
Astor,	20,000		NW¼ Sec. 5, T. 57, R. 31 160 A,	A. W. Boardman, 35 Court St., Boston.
Atlas,	20,000		NE¼ of E½ & NW¼ of NW¼ Sec. 31, T. 57, R. 31,	L. W. Clark, Boston.
Aztec,	20,000		W½ Sec. 31, T. 51, N. of R. 37,	L. W. Clark, Boston.
Bay State,	20,000		SW¼ Sec. 20, T. 58, R. 31,	L. W. Clark, Boston.
Beaver,	20,000		NE¼ Sec. 32, T. 58, R. 31,	A. W. Boardman, Boston.
Bohemian,	20,000		E½ Sec. 31, NW¼ Sec. 32, T. 51, R. 37, W,	R. H. Rickard, 21 Nassau St., N.Y. H. W. Warren, 60 City Ex., B'st'n.
Boston,	20,000		Brome co., Canada East,	H. P. Mount, 3 Hanover St., N. Y.
Canada,	100,000			
Carp Lake, M.,	20,000		T. 51, N. R. 43, W. S½ of N½ of N. Sec. 14, and E½ Sec. 23, and NE¼ Sec. 23, 440 A.	W. H. Abel, 70 Wall St., N. Y.
Cascade, M.	20,000		SW¼ Sec. 9, T. 49, N. R. 39, W. in Ontonagon co., Mich.	G. F. Riley, 35 Wall St., N. Y.
Copper Creek,	1,000	$100,000	Missouri,	H. M. Thompson, Missouri, Mo.
Copper Falls,	20,000		Sec. 14, T. 58, N. R. 31, W, Keewenah Point,	97 State, Boston.
Copper Harbor,	20,000		S½ Sec. 10, T. 58, R. 28, 320 A, Keewenah co.,	Fred. Beck, 43 City Ex., Boston.
Copper Creek,	20,000	500,000	Douglas co., Wisconsin,	T. B. Lawson, 73 Broadway, N. Y.
Central,	20,000	500,000	E½ Sec. 23, T. 58, N. R. 31, W,	J. Stanton, Jr., 25 Nassau, N. Y.
Cornwall,			Strafford, Orange co., Vt.,	D. H. Whitney, 17 State St., B'n.
Continental,	200,000	500,000	Martinsburg, New York,	J. Sickles, 50 Ex. Pl., N. Y.
Corinth,	20,000	500,000	Corinth, Orange co., Vermont, Wisconsin,	W. A. Cleveland, 191 B'way, N.Y. Boston.
Copper Hill,				
Ducotah,	20,000		Sec. 35, T. 55, R. 34, Portage Lake,	J. M. Cooper, Milk St., Boston.
Delaware,	20,000	500,000		S. M. May, 326 Walnut St., B'st'n
Derby,			Ontonagon co., Mich.,	P. C. Blancan, 35 Wall St., N. Y.
Dorchester,	20,000		800 A.,	31 and 32 City Ex., Boston.
Douglas,	20,000		E¼ Sec. 30, T. 55, R. 3,	S. J. Edwards, William St., N. Y.
Dudley,				H. Bigelow 43. City Ex., Boston.
Eagle River,	20,000		T. 58, R. 31, Secs. 28, 29, 33, 34,	A. Lawson, 70 State St., Boston.
Ely,	100,000	500,000	325 A., Richmond, Canada East,	Ernest Sacchi, 82 B'way, N. Y.
Empire,	20,000		1798 A., Secs. 1, 2, 11, 12, T. 58, N. K. 28, W. K'w'n co., Min.,	J. S. McMullin, 423 Walnut, Phil.
Eureka,	20,000		W½ Sec. 2, T. 49, N. R. 41, W. Ontonagon co.,	H. Shirley, 137 B'way, N. Y.
Evergreen Bluff,	20,000		NE¼ Sec. 6, T. 50, R. 38,	F. W. Capen, 44 Ex. Pl., N. Y.
Flint Steel R.,	20,000		Sec. 11, 12, T. 50, N. R. 39, W,	F. K. McCully, 157 B'way, N. Y.
Forest City,	20,000		320 A. NE¼ Sec. 36, and SE¼ Sec. 25, T. 51, R. 43,	J. F. Paul, 19 Phœnix Building, Boston.
Franklin,	20,000		SW¼ Sec. 24, T. 55, N. R. 31 W.,	C. Emery, 26 Kilby St., Boston.
Franconia,	60,000	300,000	New Hampshire,	J. Hanna, 162 Fulton St., N. Y.
French Creek,	100,000		Chester co., Pennsylvania,	R. Roberts, 21 Nassau St., N. Y.
Garden City,	20,000		SW¼ Sec. 60, N. W. Sec. 29, T. 58, N. R. 31 W,	R. H. Howe, Chicago.
Girard,	20,000		600 A. Sec. 15, T. 58, N. R. 28, W. Keweenaw co., Mich.,	B. A. Hoopes, 324 Walnut, Phil.
Gr'd Portage,	20,000		SW¼ Sec. 36, R. 34, W,	A. S. Kellogg, 22 Pine St., N. Y.
Great Western,	20,000		SE¼ Sec. 30, & SW¼ Sec. 29, T. 21, K. 320 A., Ontonagon	J. M. Cooper, 24 City Ex., B'st'n.
Hamilton,	20,000		SE¼ Sec. 35, S½ Sec. 36, T. 50, R. 41, SW⅝ Sec. 21, R. 20, 144¼ A.,	J. B. Townsend, 44 Exchange, N. Y.
Hancock,	20,000		SW¼ Sec. 26, Tract of Sec. 25, T. 5, R. 34, W.,	Fred. Beck, 43 City Ex., Boston. do. do. do. do.
Hanover,	20,000			
Hartford,	20,000	500,000	320 A. E½ & SE¼ Sec. 32, SW¼ & W⅝ Sec. 33, T. 50, R. 40, W,	T. M. Tyng, 61 Cedar St., Boston.
Henwood,			Michigan,	
Hope,	20,000	50,000	240 acres in T 57, R 32, Kw co	21 Nassau St., New York.
Humboldt,	20,000		Sec. 21, T. 58, R. 31, W,	Hor. Bigelow, 43 City Ex., B'st'n.
Hudson,	20,000		Ontonagon co.,	P. C. Blancan, 35 Wall St., N. Y.
Huron,	20,000		Sec. 2, T. 54, R. 34, W,	Hor. Bigelow, 43 City Ex., B'st'n.
Isle Royale,	20,000		NW¼ Sec. 1, T. 54, R. 34, W,	F. W. Chapen, 33 Ex. Pl., Boston.
Keweenaw,	20,000	500,000	Michigan,	F. W. Chapen, 44 Ex. Pl., Boston.
Knowlton,	20,000		SE¼ Sec. 1, W½ of SW¼ Sec. 1, and other lands,	Fayette Brown, Cleveland, Ohio.
Lafayette,	20,000		Secs. 25, 30, 36, T. 51, N. R. 43, and 44, W, Ontonagon,	P. C. Blancan, 35 Wall St., N. Y.
Lyster,	200 00	$400,000	Township Nelson, Canada East,	H. W. Nelson, 24 City Ex., B'st'n
Lower California	40,000	2,000,000	N. part of Lower California,	55 William St., N. Y.
Madison,	20,000		Part sec. 18, 19 entire, 29, 31,	Fred. Beck, 43 City Ex., B'st'n.
Merryweather,	20,000		Secs. 9, 19, T. 48, N. R. 4, W.,	J. T. Waters, New York.
Mandan,	20,000		680 A. Secs. 8, 17, 19, 30, T. 58, N. R. 29, W., Keweenaw co., Min.,	B. A. Hoopes, 324 Walnut, Phil.
Manhattan,	20,000		W½ Sec. 11, NW¼ Sec. 14, T. 58, N. R. 32, W, 300 A.	J. W. Davies, 21 Nassau St., N.Y.
Mendotta,	100,000	500,000		M. Taylor, 30 Wall St., N. Y.
Mass. M. Co.,	20,000		SW¼ Sec. 7, T. 50, N.R. 38, W,	J. M. Cooper, Pittsburgh.
Mesnard,	20,000		NE¼ Sec. 24, T. 55, R. 34, Calaveras co.,	L. Barr, 12 Phœnix B'gs, Boston. 606 Mont St., San Francisco
Melones & Stan.,				
Minnesota,	20,000		Sec. 15, T. 50, N. R. 39, W,	S. M. Pond, 12 Pine St., N. Y.
Maryland,			Maryland,	Baltimore.
Merrimac,	20,000		NW¼ Sec. 34, T. 51, R. 38, W, Ontonagon,	J. M. Mills, 284 Pearl St., N. Y.
National,	20,000		Sec. 16, T. 50, R. 39, W. 1 088 A.	J. M. Cooper, Pittsburgh.
Native,	20,000		Keweenaw Point, Michigan.	
Nashua,	50,000	100,000	320 A. N. Ontonagon.	W. F. Hardy, 27 City Ex., B'st'n
Nebraska,	20,000		NE¼ Sec. 12, T. 50, and other lands,	S. W. J. Webb, 54 Wall St., N. Y.
Nequa'cett,	20,000		Sec. 26, T. 51, R. 43,	G. S. Frost, Detroit.
New York,	20,000		240 A. SE¼ Sec. 10, E½ NE½ Sec. 15,	H. W. Nelson, 24 City Ex., B'st'n.
New Burra,			Baltimore,	R. Roharts, 19 Nassau St., N. Y.
New Jersey Con.	100,000	1,000,000	New Jersey,	W. Bowes, 17 William St., N. Y.
N. Y. & Passaic,	100,000		Harrison, Bergen c.,	T. H. Belt, Jr. 23 William St., N.Y.
New Devon,				T. H. Belt, Jo. do. do.
North Western,	20,000		W½ Secs. 24, 25, 26, E½ Secs. 26, 35, T. 58, N. R. 31,	J. M. Cooper, Boston and Detroit.
Norwich,	20,000	500,000	Secs. 11, 12, T. 40, N R. 39, W and other lands, 1,300 A.,	P. C. Blancan, 35 Wall St., N. Y.
Ogama,	20,000	500,000	NW¼ Sec. 6, T. 50, N R. 35, W.	G. E. Leffingwell, 162 B'way, N.Y
Ontonagon,	20,000		631 A. Secs. 20, 21, 28, T. 50, N. R. 39, W. Rockland,	G. Hart, 11 Pine Street, N. Y.
Ont'n'g'n, Mass.	20,000		Ontonagon,	William D. Williams, Michigan.
Otisville,	100,000	500,000	Otisville, Orange co., N. Y.,	C. Windsor, 60 Wall St., N. Y.
Penn. Manuf'g.,	20,000	1,000,000	4 320 A. Secs. 13, 14, 15, 24, 25 Secs. 19, 11, 12, 23, 25, T. 58, N. R. 39, W.	S. M. May, 326 Walnut St., Phil.
Pewabic,	20,000		W½ Sec. 25, T. 55, N R. 34, W.	C. Emery, 30 State, Boston.
Pitts. & Boston,	20,000		Ts. 58, 57, N. R. 31, 32, W, 12,405 A.	H. A. Johnston, Pittsburgh.
Pontiac,	20,000		SE¼ Sec. 14, T. 55, N. S. 31, W.	C. Emery, Kilbey St., Boston.
Portage Lake,	20,000		Houghton co. Michigan,	23 William St., N. Y.
Prescott,	100,000	1,000,000	Central Arizona.	69 Broadway, N. Y.
Providence,	20,000	500,000	240 A. in Keweenah co., NW¼ Sec. 10, W½ NW¼ Sec. 10, T. 57, R. 32, W.	J. W. Davis, 21 Nassau St., N. Y.
Phila. & Boston,	20,000		640 A. Sec. 14, T. 58, N. R. 28, W. Keweenaw co., Mich.	J. S. McMullin, 423 Walnut St., Boston.
Quincy,	20,000		Sec. 26, T. 54, N. R. 34, W.	W. H. Smith, 51 Ex. Pl., N. Y.
Republic,	8,000	200,000		H. Baldwin, 70 Wall St., N. Y.
Reliance,	20,000		Secs. 21, 22, 27, T. 58, N. R. 28, W, 10,785 A.	H. K. Thomas, 11 Wall St., N. Y.
Rochester,	200,000	500,000		J. A. Ferguson, 8 Wall St., N. Y
Ridge,	10,000		Sec. 35, T. 51, R. 38, W,	
Rockland,	20,000		Sec. 11, T. 50, R. 39,	S. J. W. Barry, 12 Pine St., N.Y.
Resolute,	20,000		1 120 A. Secs. 7, 18, 19, T. 58, N. R. 29, W. Keweenaw co., Mich.,	F. Beck, 43 City Ex., Boston.
St. Mary,	20,000			E. B. Sutton, 64 & 66 B'way, N.Y.
St. Margaret,	200,000	1,000,000	Canada,	P. C. Blancan, 35 Wall St., N. Y.
Sharon,	20,000		Ontonagon co., Mich.,	S. J. Edwards, 22 W'm. St., N. Y
Sheldon & Col.,	20,000		SE¼ Sec. 36, T. 55, R. 34, W.	H. W. Nelson, Boston.
South Side,			SE¼ Sec. 34, T. 55, R. 34, W,	Copper Harbor.
Societe Fran'se,	10,000		T. 58, 59, N. R. 28, 30 W,	Carlos Cobb, 22 William St., N Y
Suffolk,	20,000			S. J. W. Barry, 12 Pine St., N. Y
Superior,	20,000		W¼ Sec. 14, T. 50, N R. 39, W.	H. W. Nelson, Boston.
Toltec Consol.,	20,000		Secs. 25, 26, R. 50, R. 36,	A. S. Kellogg, 22 Pine St., N. Y.
Union,	20,000	500,000		17 William St., N. Y.
Ural,			Wisconsin,	
Vulcan,	20,000		1 120 A. Secs. 7, 17, 18, T. 58 N R. 27, W. Keweenaw co.	F. K. Womrath, 324 Walnut, Phil.
Victoria,	20,000		Secs. 29, 30, 33, 34, T. 50 R. 34, and other lands,	L. W. Clarke, Boston.
W. Minnesota,	20,000		Secs. 17, 18, 19, T. 50, N. R. 39, W.	C. T. Howard, Boston.
Wickopee,	100,000	500,000	Massachusetts,	G. A. Snelen, 12 PineSt., N. Y
Vermont,	100,000	500,000	W. Fairlee, Orange co., Vt.,	
Wauka Yuma,	600,000	6,000,000	Arizona,	35 William St., N. Y

S. means section; T. township; R. range.

AMERICAN
Journal of Mining.
[ILLUSTRATED.]

GEORGE FRANCIS DAWSON,
EDITOR.

By publishing contributions, the JOURNAL OF MINING *does not necessarily endorse the positions assumed by contributors.*

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For Europe.

At the request of numerous subscribers, we shall print an edition of the JOURNAL early on Saturday morning for the European mail.

NEW YORK, SATURDAY, MAY 12.

Contents of this Number.

EDITORIALS.—Nitro-Glycerine Experiments—"Pulverized" Turpentine as a Fuel—Colorado Mining Interests—The Union Pacific Railroad Survey—Mining Machinery, etc.
MINING STATISTICS OF NOVA SCOTIA, by Dr. R. P Stevens.
ASHCROFT'S PATENT LOW-WATER DETECTOR, described and illustrated.
MISCELLANEOUS.—Smelting Furnaces—Atmospheric Pressure in Mines—Iron Smelting in Colorado—Sodium Amalgam—Historical Sketch of Metallurgy, etc.
MINING SUMMARY.—Latest news from Nevada, Oregon, Idaho, California, Montana, Colorada, Arizona, Louisiana, Canada West, Mexico, North Carolina, etc.
OIL SUMMARY—Latest news from Pennsylvania, Michigan, Alabama, Canada West, California, etc.
NEW MINING COMPANIES.—Capital Stock, No. of Shares, Situation of Mines, etc.
SPECIAL SCIENTIFIC BREVITIES.
PATENT CLAIMS.—The latest allowed to Inventors of Mining and Milling Machinery, Processes, etc.
MINING COMPANY MEETINGS.
MINING COMPANY STATEMENTS.
TABULAR MATTER—Gold, Copper Lead and Silver Mining Companies—Names—No. of Shares—Capital Stock—Situation of Mine—Name of Secretary and Place of Business.
MARKET REVIEW. — Finances, Stocks, Metals, Petroleum, etc.
NEW YORK AND BOSTON DAILY QUOTATIONS OF MINING AND OIL STOCKS.
CHEMICALS USED IN THE VOLUMETRIC ASSAY—Prices, etc.
ASSAYING IMPLEMENTS.—Prices.
MINERAL AND OTHER OX-DITS.
NEVADA STOCKS.—Latest advices by Mail and Telegraph.
NEW YORK METAL MARKET.
LONDON METAL MARKET.

NITRO-GLYCERINE EXPERIMENTS.

Mr. Nobel is giving his attention to the best method of rendering nitro-glycerine innocuous, when stored or in transit. He states that by mixing this powerful agent with methylic alcohol (a cheap spirit popularly known as spirit-of-wood) the nitro-glycerine is rendered unexplosive, either by percussion or heat. When required for use, water is added, which absorbs the spirit, and the oil sinks to the bottom of the vessel, whence it is drawn by a syphon and its explosive nature thereupon found to be restored. Experiments for testing the value of this discovery were made on the 5th inst. in this city, which are said to have been very satisfactory. Its formidable power has also been tested lately in California, both in San Francisco and on the Central Pacific Railroad. In these experiments the downward power of the charge was forcibly developed. From the numerous trials made, we should judge that nitro-glycerine may be safely prepared and used by practiced hands, as, for instance, by Mr. Nobel; but, until the causes of the late accidents are more fully known, the public will not be satisfied that its general use is unattended by danger. For instance, a Mr. S. P. Ely, of Marquette, Michigan, states that he had prepared nitro-glycerine for blasting, and from some unexplained cause the substance exploded in his office; moreover, that on a second trial he met with similar bad success. Mr. Nobel is reported to say that the material of which nitro-glycerine is composed, will not generate heat of themselves. We presume, therefore, that they will not decompose. Mr. Ely says that nitro-glycerine can only be prepared at a low temperature, and violently decomposes with an increased temperature, and consequently generates heat. We look upon the subject as one of the greatest importance to miners, and shall be glad if the new discovery enables us to transport nitro-glycerine, at least as safely as blasting powder, while we believe that it has already been proved much more efficacious.

"PULVERIZED" TURPENTINE AS A FUEL.

Among the latest adaptations of heat-producing substances to the furtherance of industrial art, is that of "pulverized" turpentine. Captain Shpacovski, Professor at the Paul Military School, St. Petersburg, recently exhibited experiments upon this substance at the Old Admiralty. By an apparatus which he called a pulveriser, he caused every particle of the fluid to burn. The flame from his apparatus was enormous, reaching two feet in height, and rushing through the burner with a noise similar to that of steam escaping from a pipe. The temperature is equal to that of molten steel—1,040 deg. Reaumur. After melting wire, copper, etc., and showing how it was adapted to carbonizing wood for ship-building to the depth of only 1-120 of an inch, he proceeded to describe his steamboats. The model experimented with—24 feet in length—was propelled at the rate of six knots per hour by an engine of two-horse power, heated by four pulverizers, consuming 3 lb. turpentine per horse-power per hour. He expects to reduce this consumption to 1½ lb. or 2lb. per horse-power, and has orders for twenty similar boats to be used for passenger traffic on the canals. The new fuel is more expensive than coal, but Captain Shpacoviski claims that this will be more than compensated for by the smaller quantity used. Steam can be got up with it in ten minutes, and the fire can be extinguished immediately when not required.

COLORADO MINING INTERESTS.

In another column we give the report of the Treasurer of the Bullion Consolidated Mining Co. This report is a most unprecedently favorable one, showing a gain, in six months, of $225,000 in cash, and stock in another company, of which the market value is $50,000. This gives, exclusive of the stock interest, seventy-five per cent. surplus for dividends. Mr. Whiting, who superintends the company's affairs in Colorado, is a man of unquestioned integrity, and the possessor of vast and immensely valuable mining property, and, with ordinary management, we do not see why this company, founded upon his property, can fail to be a very successful one. The object of this company, in view of the extent of its mining property, is to make sales of portions of its mining lodes to those who will make *bona fide* improvements, and thereby improve and make valuable the balance belonging to the company. Most liberal inducements are held forth to those desiring to invest in mining, by which all the cash contributed may be expended in actual mining, and the Bullion Consolidated Mining Co. to be paid only in case of successful mining, by a per centage of results. We would advise those interested in Colorado mining affairs to call at the office of the Bullion Consolidated Mining Co., 37 Broad street, and examine the very extensive cabinets of Colorado ores.

THE UNION PACIFIC RAILROAD SURVEY.

The American Bureau of Mines, under an engagement with the Union Pacific Railroad to make a geological and agricultural survey of the lands acquired from the government, has delegated Prof. Egleston, of its Board of Experts, to conduct the field-work for a section of 100 miles. This gentleman, with a corps of assistants, took his departure for Omaha on Monday. The results of the survey will be reported this summer by the Bureau of Mines. The Union Pacific Railroad has taken a wise course in thus submitting to investigation, at the outset, the economical conditions of its lands, whether mineral or agricultural, instead of leaving their development to chance or mistaken energy. The first one hundred miles of the line pass through the Platte Valley—a beautiful section of prairie country, whose agricultural, if not mineral resources, this survey will bring out. It is said to be policy of this railroad company to induce immigration. The reports of the Bureau of Mines will be published in German, French, and English.

MINING MACHINERY.

The report of the meeting of the Miners' Association, of Devon and Cornwall, England, which we have been looking over, shows the obvious advantages which the modern appliances of machinery afford to miners. In England a prejudice exists among the miners themselves, against boring machines and new mechanical appliances generally. Capitalists, however, are beginning to find out the great savings which may be effected by machinery. It was stated at the meeting, and it is undoubtedly true, that no business conducted with so much waste of time and money, as mining there is conducted, could possibly pay. Here these prejudices against new inventions do not exist, and all miners would gladly use new appliances if they could make sure of the merits of the respective machines. We shall be glad to forward the interests of miners by publishing the results of actual working trials of machinery likely to be useful in mining operations.

SULPHATE OF IRON AS A DISINFECTOR.

Now that the cholera has actually made its appearance in this city, the following from recent correspondence in the *London Chemical News* will prove *apropos:*

Great attention is paid, and with reason, in this country, (England,) in Holland, and in Belgium, to the disinfection of stalls and of the excrements of animals of the bovine race, infected with typhus, in order to arrest the ravages of this terribly contagious malady. The use of phosphoric acid, which is proposed for this purpose, is rational, in that it enriches the manure, but not if you consider the expense, the difficulty of transport, and the many precautions necessary in handling it. Sulphate of iron, on the contrary, is of insignificant value, (say, a farthing per pound), economical, and easy of employment, and having great effect upon all animal matters, would completely purify the infected places and the manures of animals suffering from typhus. It does not injure the manure, but conserves its most energetic parts by converting the carbonate of ammonia into sulphate of ammonia, a fixed salt, which is easily appropriated by the plants. It was in 1845 that Mr. Schattermann, director of the mines of Bouxwiller, Departement du Bas-Rhin, proposed the disinfection of fecal matters and of manures by means of sulphate of iron, and since then this salt has been generally employed in France for these purposes, as well as to purify the slaughter-houses, ditches, and all places where noxious emanations arise. Its use is very simple. Dissolved, it gives a very acid liquid, that can be handled without danger, and which penetrates everywhere when used to wash the infected places or to mix with the manures. When the cholera was at Marseilles, great quantities of sulphate of iron were used, not only in France, but also in Switzerland and in Germany, to disinfect closets, slaughter-houses, and all places giving off noxious emanations, and with perfectly satisfactory results.

Exempting Petroleum.

It seems now to be a settled fact that crude petroleum is to be exempt from tax or duty. The Committee on Ways and Means reported a joint resolution to that effect, which was considered by the House and passed.

MINING STATISTICS.

NUMBER ONE.

NOVA SCOTIA GOLD.

[Written by Dr. R. P. Stevens, for the Journal of Mining.]

The question is so often asked in financial circles "Does mining pay?" or quite as often put in another form, "Mining does not pay," that any reliable statistics upon this subject are to be received with pleasure and satisfaction.

The report of the Chief Commissioner of Mines of Nova Scotia, the Hon. P. S. Hamilton, for the year 1865, is before me, and is eminently satisfactory.

I give a few extracts from it. There are in the Province nine prominent districts, and some unproclaimed. From the whole the total amount of gold raised was 4867 oz., 05 dwts., 22 grs. The average yield per ton of quartz was 1 oz., 21 grs. The highest yield per ton was from Stormont district—1 oz., 15 dwts., 15 grs. Stormont, Sherbrooke, Montague and Waverly averaged over 1½ oz. per ton. Mine Harbor, Tangier, Oldham and Renfrew averaged nearly 3-4ths of an oz. The number of mines worked was 93; average number of men employed, 692. Amount of quartz crushed was 23,835 tons—average per man, 34 tons. The average yield per man employed was $664 80. This amount of value of earnings per man would not pay in our western territories, where wages range from $5 to $15 per day; but could pay in Nova Scotia, where men can be hired from 75c. to $1 per day, and the best of miners for $1 25. Say the average price per man is $1 per day, the yield per day has been $2 13, or $1 13 profit on each man's work. From this amount should be deducted interest account and loss from deterioration of mine and machinery, whatever there may be, and still there is a handsome margin for nett profit. The highest yield of quartz was from Mine Harbor, 16 oz., 10 dwts; the next highest from Oldham, 10 ,oz., 17 dwts. The highest average yield per man was at Mine Harbor, the next Waverly, and the third at Sherbrooke. There is another quite as interesting view of the Nova Scotia mines, and this is their increasing prosperity.

In 1863 the yield per man was ..... $0 95 per day.
In 1864 " " " ..... 1 39 "
In 1865 " " " ..... 2 13 "

with nearly three months of draught.

Gold mining, from these statistics, looks (at least in this Province) like a steady and successful business, yielding a handsome remuneration to labor, and profit to actual capital employed.

MINING COMPANY STATEMENTS.

BULLION CONSOLIDATED MINING COMPANY, OF COLORADO · CAPITAL STOCK $300,000; INCORPORATED UNDER THE LAWS OF MASSACHUSETTS.

From the Treasurer's report to the stockholders, we abstract the following: "Since the organization of the Company in October, 1865, in addition to the $100,000 cash working capital paid in during the month of October, $225,000 has been paid into the Treasury derived from sales of property belonging to the Company, also 25,000 shares of the capital stock of the Incas Silver Mining Company of Colorado (a company organized under the laws of Massachusetts, with $75,000 cash working capital in its treasury.) This amount of stock was received in payment for property released, which constitues a portion of the mining property of that Company. This stock is valued, at the present time, at $2 pear share, and has great prospective value.

RECAPITULATION.

Cash working capital of the Company.....	$100,000
Cash delivered from sales.....	225,000
25,000 shares of the Incas S. M. Co., val. p. sh. $2	50,000
	$375,000
Cr. Dividend paid February 1, 1866.....	75,000
Balance in Treasury.....	$300,000

Of this amount there is applicable to dividends one hundred and fifty thousand dollars in cash, and 25,000 shares of the Incas S. M. C., leaving the working capital of one hundred thousand dollars still in the treasury. The amount of property disposed of so far has been trifling compared with the immense amount still held by the Company, and is exclusive of the property described in the printed pamphlet. Large quantities of ores, representing different mining properties belonging to the Company, have been forwarded to Europe, with maps, descriptions, etc., and the prospects of making large sales in that direction are of a highly favorable nature. Reliable parties in this section are also engaged in obtaining subscriptions for purchase and developments of property belonging to the Company. Active and energetic developments will be made immediately upon the choicest mining property of the Company, under the direction of its agent in Colorado, and it is expected that at the next annual meeting of the stockholders, results of a most satisfactory character will be given. J. P. WHITNEY, Treasurer."

Company's offices: 37 Broad street, New York; 19 Lindall street, Boston; Central City and Empire City, Colorado.

BROAD TOP COAL AND IRON COMPANY. 119 BROADWAY, NEW YORK.

The prospectus states that this property is situate at Coalmont, in the Broad Top Coal Field, Pennsylvania, and consists of 3,000 acres coal and iron land in one body, with the railway running through it. A deep ravine penetrates the central portion of the property, giving free drainage and wonderful facilities for the economical working of the coal. There are six beds of coal underlying the estate, of 5, 9, 3. 7. 3½ and 3½ feet thickness respectively. The coal, especially that of the lower beds, is of the finest quality, unsurpassed for forge fires; and as a steam generator, is remarkably free from sulphur, so that it can be used in blast furnaces without coking. The second lowest bed alone contains, by estimate, 14,520 tons per acre, or a total of forty millions of tons. This bed is accompanied with six feet of iron ore, which, being so closely connected with the coal, causes the value of each to be vastly increased. It is sixty-five miles nearer to New York than the Cumberland mines, and can be delivered in Philadelphia at a cost of $4.25 per ton, and to New York at $5.25 per ton.

MADISON SILVER MINING COMPANY OF NEVADA; ORGANIZED UNDER NEW YORK STATE LAWS; CASH CAPITAL STOCK, 30,000 SHARES; PAR VALUE $100 EACH.

The mines of this Company, says the prospectus, are located in the "Mountain Wells" District, Churchill County, Nevada, and embrace the following ledges: Madison ledge, 1,200 linear feet; Alcyon ledge, 1,200 feet; and the Indiana ledge, 1,200 feet. An analysis of specimens of ore from the Indiana and Alcyon lodes was made, with the following results: Indiana ledge, $382.80 per ton; Alcyon ledge, $928.40 per ton.

Company's office, 71 Broadway, New York.

MARKET REVIEW.

FRIDAY EVENING.

The price of Gold to-day reached 129¾; closing at 128¾. The loan market continues easy, the difficulty being to procure borrowers on safe terms; 4 and even 3 per cent. are, in some cases, accepted by lenders. Commercial paper is unchanged with but little demand.

Foreign exchange is steady. Bills on London at 60 days 108¾ @ 109¼; for Commercial 109¼@109¾; for Banker's at short sight, 110¼@110½; on Paris at 60 days 5f. 15c@5f. 12½.

The stock market is firm without animation; for particulars we refer to our tabular statements. It will be seen by reference to our telegraphic report of the San Francisco stock market, that mining shares there are firmer and advancing.

Coal.—The supply of foreign coal is small, with little demand except for gas coal. Domestic has been in fair requestat $5 75@$8 50 per ton of 2,000 lbs. The inquiry for the last has been fair; cargo prices unchanged, and the stock increased. The following are the prices realized at the auction sale of Scranton coal:

Tons. May 9		Tons. April 24.	
5,000 Lump....	$6 00 @ $ —	6,500 Lump....	$5 87½@$6 20
2,500 Steamboat.	6 — @ 6 25	3,000 Steamboat	6 40 @ 6 70
3,000 Grate.....	6 80 @ 6 90	3,500 Grate....	6 75 @ 7 00
3,000 Egg.....	6 25 @ 6 50	3,500 Egg.....	6 60 @ 7 25
3,000 Stove.....	6 50 @ —	4,500 Stove.....	7 00 @ 7 35
2,000 Chestnut..	5 35 @ 5 50	4,000 Chestnut..	5 50 @ 5 60

A new description of coal—brown coal—found in Middlesex and Monmouth counties, is, we understand, likely to come into the market. A shaft is being sunk where the bore showed a twelve-feet bed.

Shipped over the Lehigh Canal for the week and season, compared with the same time last year:

	Week. Tons. Cwt.	Season. Tons. Cwt.
Week ending May 5th	25,140 13	136,060 06
Same time last year	12,821 07	68,762 10
Increase	12,319 06	67,297 96

The following is a statement of coal transported on the Lehigh Valley Railroad for the week and season, compared with the same time last year:

	Week. Tons. Cwt.	Season. Tons. Cwt.
Week ending May 5th	22,622 12	625,532 08
Same time last year	19,259 12	567,159 11
Increase	3,363 00	59,172 17

The following shows the business of the Lehigh Coal and Navigation Company for the week and season, compared with corresponding time last year:

	Week. Tons. Cwt.	Season. Tons. Cwt.
Week ending May 5th	25,140 13	136,060 06
Same time last year	20,057 00	76,307 00
Increase	5,083 13	59,853 06

Amount of coal transported on the Philadelphia and Reading Railroad for the week ending May 34, 1866:

	Tons. Cwt.
Total anthracite coal for week	83,619 03
Bituminous coal from Harrisburg and Dauphin for the week	4,795 07
Total of all kinds for week	88,414 10
Previously this year	1,128,414 01
Total	1,216,828 11
To same time last year	1,129,760 13

The following shows the receipts of the Delaware Division Canal Company for the week and season, compared with corresponding time last year:

Week ending May 5, 1866	$ 8,135 28
Previous in 1866	35,217 39
	$43,352 62
Week ending May 4, 1865	$ 6,541 03
Previous in 1865	14,398 82
	20,938 85
Increase in 1866	$22,413 77

Coal transported on the Delaware, Lackawana & Western Railroad for the week and season, compared with the same time last year:

	Week. Tons. Cwt.	Season. Tons. Cwt.
Week ending May 5th	31,744 01	438,249 10
Same time last year	30,142 01	316,930 14
Increase	1,602 00	121,318 96

The following are the receipts of the Delaware Division Canal Company for the week and season:

Week ending May 5th	$ 8,135 23
Previously this year	35,217 39
Total	$43,352 62
Week ending May 4, 1865	$ 6,541 03
Previously in 1865	14,397 82
	20,938 85
Increase in 1866	$22,413 77

The following is a statement of coal transported over the Delaware and Hudson Canal for the week and season ending May 5, and the same periods last year:

	Week. Tons.	Season. Tons.
Delaware and Hudson Canal	46,680	151,270
Pennsylvania Coal Co.	590	2,190
Total	47,270	153,460

For the same period last year:

	Week.	Season.
Delaware and Hudson Canal	23,494	70,963
Pennsylvania Coal Co.	.....	5,187
Total	23,494	76,155

Philadelphia and Reading Rail Road for year ending November 30 '65:

	Total received at Philadel.	Total main road and b anches.
Anthracite Coal	2,636,481	3,154,821
Bituminous "	214,135	306,489
Iron Ore	40	147,234
Iron, (bar, Boiler, Cast'gs & Steel)..	16,781	35,102
Pig Iron	30,171	101,009
Lebanon Valley Branch Rail Road:		
Anthracite Coal, Westward		133,610
do do Eastward		4,465
Bituminous, " "		306,490

Iron.—Prices for Pig have declined. The demand is small and sales limited. The stock of Scotch is estimated at 5,000 tons. The supply of American is small, but increasing. The sales are—250 tons Glengarnock, at $43, and 100 do. at $44; 150 tons Coltness No. 1, at $47; and 600 tons American No. 1, at Elizabethport, at $50. American No. 1 may be quoted $42 @ $43; No. 2, $40 @ $42.

Bar Iron—Is firmer.

Copper—Only a moderate business in American Ingot Copper, at former prices. The sales of Baltimore are at 28 @ 28½ c., and Lake at 29@30 c. No change in new sheathing and yellow metal—say 40 c. for the former and 34 c. for the latter. The average price of Copper ores, 2387 tons, sold at Tabb's Hotel, Redruth, England, on 26th April, was £4 6s. 0d. per ton.

Lead.—A rather firmer feeling in the market and some speculative demand. Spanish, German refined, and English are quoted $8 25@$8 50. Bar 9c.; Sheet and Pipe 11½c.

Spelter—Silician, firm but little doing.

The importation to April 30. was	121,600 plates
To same time last year	3,770 "
Increase	117,830 plates

Tin—Is firmer, but without change of price: 1,500 slabs sold at 20c. gold.

Importation to April 30	50,725 pigs
Same time last year	22,170 "
Increase	28,555 pigs

Tin Plates show no particular change, with little business doing.

Importation to April 30	250,265 boxes
To same time last year	125,205 "
Increase	137,060 boxes

Salt.—Little of importance doing; the arrivals are light; prices unchanged but firm.

Liverpool, Ground, per sack	$1 60@$1 70
Liverpool, Fine, Ashton's	Gold 2 75
Liverpool, Fine, Worthington's	2 75@ 2 85
Liverpool, Fine, Jeffreys & Darcey's	2 75@ 2 85
Turk's Island, per bush	43@ 45

Petroleum—Shows a decidedly improved tendency with an increase in price to 28½c.@29c. for crude. The receipts are small and the market is said to be over sold. The removal of the duty on Petroleum will undoubtedly cause many wells to be again started, and help to revive the trade. Refined, in bond, is quoted at 43c. for present delivery. Sales of about 2,000 bbls. for June delivery, at 44c. There was received the following during the last week:

Crude, bbls	4,303
Refined, "	2,550

The exports were 343,000 gallons. To Cuba, 10,360 gallons; to Cork, 96,982; to Havre, 90,849; to Hamburg, 41,194; to Cronstadt, 103,228. In this direction the demand continually increases.

At Pittsburg, May 8th, there was a decided tendency to hold for higher prices, the rates were 14, 14¼, and 14½ for bulk, equal to 18, 18¼ and 19, including barrels. Receipts for past week 9,596 bbls., chiefly in bulk.

Refined Oil was active; buyers entered the market early, and a number of parcels were disposed of, principally for export to Philadelphia. The sales were as follows: Bonded, sales on the spot, 500 bbls. 35c., sales for Philadelphia delivery, viz.: 1,000 bbls. bonded during the month, b. o., 42c.; sales of two lots, 900 bbls. immediate delivery, Philadelphia, 42½c; sales of 1,000 bbls. June, Philadelphia, b. o., 43c.; sales of 1,000 bbls., May, s. o., at 42c.; sales of 50 bbls., July delivery, b. o., 44c.; sales of 1,000 bbls., September, b. o., 46½c.

Free Oil was dull; nobody wanted to buy. The supply on the market is not large.

The following are the receipts of Oil by the river and railroads at Pittsburg for the past week; also from the 1st of January, with a comparative table for the same period in 1865:

	RIVERS.	RAIL.	TOTAL.
Monday, April 30	21,531	1,349	22,880
Tuesday, May 1	32,000	253	32,253
Wednesday, May 2	21,052	653	21,705
Thursday, May 3	5,658	680	6,288
Friday, May 4	13,927	652	14,479
Saturday, May 5	6,244	.....	6,244
Total for week	100,392	3,497	103,889
Since January 1	314,202	82,218	396,420
Receipts to May 4	414,594	85,715	500,359
Same time in 1865	99,828	40,097	139,925
Increase in 1866	314,766	45,618	360,384

MINING AND OIL STOCKS.

OIL STOCKS.	May 7. BID.	ASKED.	May 8. BID.	ASKED.	May 9. BID.	ASKED.	May 10. BID.	ASKED.	May 11. BID.	ASKED	May BID	ASKED.
Bennehoff Run	10 65	10 75	10 75	10 95	11 95	12 00	12 80	12 90	12 25	12 35	.....	.....
Bennehoff Mutual	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buchanan Farm	40	42	40	41	41	45	42	45	41	43	.....	.....
Bliven	.....	2 50	.....	1 70	.....	2 00	.....	.....	.....	1 50	.....	.....
Bradley	.....	25	.....	15	.....	25	.....	15	.....	9	.....	.....
Brevoort	1 50	2 00	1 85	2 00	1 75	2 00	1 75	.....	2 00	2 50	.....	.....
Central	1 95	2 05	1 80	1 90	1 85	1 95	2 05	2 10	2 20	2 20	.....	.....
Empire City Pet'm Co	30	40	35	43	.....	45	.....	45	.....	38	.....	.....
Empire and Pit Hole	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Excelsior	80	90	80	90	80	....	80	1 00	80	1 00	.....	.....
First National	10	....	9	13	10	15	11	15	10	12	.....	.....
Hamilton McClintock	.....	.....	1 10	2 00	.....	1 75	1 40	2 25	1 55	1 75	.....	.....
Ivanhoe	2 50	2 90	2 70	2 90	2 50	2 90	2 65	2 90	2 00	2 10	.....	.....
Mt. Vernon	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	.....	.....
N. Y., Phila. & Baltimore	.....	50	10	40	10	.....	.....	50	10	30	.....	.....
N. Y. & Alleghany	3 30	3 65	3 40	3 75	3 50	3 75	3 55	3 75	3 50	3 70	.....	.....
Northern Light	60	2 50	1 00	.....	.....	2 00	.....	2 50	.....	2 00	.....	.....
Oil Creek of N. Y	56	59	60	64	65	70	60	65	60	65	.....	.....
Palmer Petroleum	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pit Hole Creek	2 05	2 10	2 00	2 10	1 90	2 00	1 90	1 95	1 90	2 04	.....	.....
Pit Hole Farms	.....	.....	.....	.....	.....	.....	.....	.....	1 80	1 90	.....	.....
Rynd Farms	20	30	30	25	15	25	16	25	15	25	.....	.....
Shade River	55	65	60	61	61	63	61	64	58	62	.....	.....
Sherman Oil Co	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union	1 00	5 50	1 00	6 50	2 00	6 00	.....	.....	1 00	6 00	.....	.....
United States	9 90	10 00	9 35	9 50	8 90	9 00	8 25	8 75	8 50	8 75	.....	.....
Webster	25	25	25	39	26	35	26	30	30	40	.....	.....
FREE LIST.												
Allen Wright	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bergen Oil & Coal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bennehoff & Pit Hole	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brooklyn	45	85	60	1 00	60	75	50	1 00	55	80	.....	.....
Cherry Run Petroleum Co	.....	20	.....	20	.....	.....	.....	10	.....	20	.....	.....
Clinton Oil	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Consolidated (New York)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Electic Oil	80	85	80	1 00	80	1 00	80	90	80	1 00	.....	.....
Equitable	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Enniskillen	1 10	2 00	.....	2 25	.....	3 00	.....	.....	.....	.....	.....	.....
Fee Simple	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Forest Co. Petroleum Co.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Germania	.....	.....	.....	.....	.....	9	5	7	.....	.....	.....	.....
Gt Western Consolidated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Guild Farm	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Heydrick	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Heydrick Bros	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
High Gate	.....	.....	5	10	5	12	.....	.....	.....	.....	.....	.....
Homewack	20	50	25	40	12	.....	.....	12	.....	.....	.....	.....
Inexhaustible	.....	15	10	25	.....	20	.....	20	.....	.....	.....	.....
Liberty	.....	20	.....	20	.....	20	.....	.....	.....	55	.....	.....
Lilly Run	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manhattan	12	18	10	21	10	17	15	17	10	20	.....	.....
National	.....	.....	.....	3 00	.....	4 00	.....	4 50	1 50	3 00	.....	.....
New York & Newark	.....	.....	6	10	5	15	5	.....	5	.....	.....	.....
New York & Philadelphia	.....	50	10	40	10	.....	.....	50	10	30	.....	.....
Second National	.....	70	25	1 00	30	1 00	35	70	35	50	.....	.....
Oak Shade Petroleum	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 90	.....	.....
Oceanic	10	12	10	12	10	.....	10	20	.....	25	.....	.....
Penn. Oil Creek	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pepper Well	.....	5 00	.....	4 90	.....	5 00	.....	5 00	.....	5 00	.....	.....
Pit Hole Petroleum No. 2	.....	12	.....	15	.....	10	.....	50	.....	.....	.....	.....
President	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pet. Consolidation	10	15	13	15	13	.....	14	15	12	15	.....	.....
Southard	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sherman & Barnsdale	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sherman Oil	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tack Petroleum Co., N.Y.	4	9	6	8	5	50	4	10	4	.....	.....	.....
United Petroleum Farms	17	18	17	21	18	21	17	20	18	19	.....	.....
Venango & Pit Hole	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Va. Oil & Coal Co.	5	5	5	9	4	8	5	.....	4	7	.....	.....
MINING STOCKS.												
Ada Elmore	2 46	2 60	2 50	.....	.....	2 60	2 65	2 70	2 65	2 70	.....	.....
Altona	.....	2 00	.....	.....	1 85	2 00	1 80	2 25	.....	2 00	.....	.....
American Flag	.....	3 00	.....	3 25	.....	3 00	.....	2 95	.....	3 00	.....	.....
Atlantic & Pacific	1 75	4 00	1 50	3 95	2 25	3 75	2 00	4 00	2 00	5 00	.....	.....
Bates & Baxter Gold	1 75	3 00	1 70	2 25	2 00	2 25	2 00	2 25	2 05	2 20	.....	.....
Benton Gold	1 55	1 70	1 50	1 60	1 55	1 70	1 50	1 60	1 50	1 60	.....	.....
Bobtail Gold	3 00	.....	3 00	.....	3 00	3 50	2 85	3 40	3 00	3 50	.....	.....
Black Hawk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Consolidated Gregory	15 80	16 00	15 00	15 75	15 65	15 90	15 60	15 90	15 30	15 50	.....	.....
Corydon	1 25	2 50	1 00	2 00	1 25	.....	1 00	2 00	.....	1 80	.....	.....
Downieville Gold	39	40	40	44	38	43	39	42	.....	45	.....	.....
Eagle Gold	.....	.....	.....	2 50	.....	.....	.....	2 50	.....	2 50	.....	.....
Gold Hill	.....	.....	1 50	.....	.....	.....	1 00	.....	1 00	.....	.....	.....
Gunnell Gold	1 12	1 20	1 10	1 12	1 10	1 12	1 05	1 10	.....	1 05	.....	.....
Gunnell Central	.....	5 00	.....	4 50	.....	.....	.....	5 00	.....	5 00	.....	.....
Holman	43	44	41	44	42	43	42	44	41	43	.....	.....
Hope Gold	3 25	4 00	3 05	3 50	3 00	4 00	2 50	3 50	.....	.....	.....	.....
Kipp & Buell Gold	1 85	2 05	1 90	2 00	1 85	1 90	1 80	1 90	1 85	2 00	.....	.....
La Crosse Gold	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liberty Gold	.....	.....	26	45	.....	30	24	25	25	26	.....	.....
Liebig Gold	.....	.....	50	85	.....	2 00	.....	1 00	60	1 00	.....	.....
Manhattan Gold	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montano	.....	.....	75	90	.....	1 00	.....	.....	.....	1 05	.....	.....
New York	46	50	45	46	40	45	44	45	42	43	.....	.....
Perigo Gold	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Quartz Hill	4 50	4 60	4 65	4 75	4 50	4 65	4 50	4 65	4 70	5 00	.....	.....
Smith & Parmelee Gold	9 95	10 00	10 00	10 15	10 00	10 15	9 25	9 30	10 10	10 20	.....	.....
Texas Gold	80	85	80	85	75	80	65	1 00	70	.....	.....	.....
Virginia City	.....	50	30	50	.....	.....	.....	.....	.....	.....	.....	.....
Union Gold	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Waddingham Gold	.....	13 00	.....	14 00	.....	14 00	.....	14 00	.....	14 00	.....	.....
Caledonia Copper	.....	.....	.....	10 00	.....	.....	.....	.....	.....	10 00	.....	.....
Copper Falls	42 00	45 00	42 00	45 00	42 00	45 00	42 50	44 00	43	45	.....	.....
Sheldon & Columbian Cop	.....	.....	2 00	.....	2 50	.....	.....	.....	5 00	.....	.....	.....
Knowlton Copper	.....	.....	3 00	.....	3 00	.....	3 00	.....	3 00	4 00	.....	.....
Mendota Copper	3 50	4 50	.....	5 00	3 50	4 50	3 50	5 00	3 50	5 00	.....	.....
Minnesota Copper	.....	13 50	.....	13 50	.....	13 50	.....	14 00	.....	14 00	.....	.....
Ogima Copper	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Princeton Copper	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 00	.....	.....
Denbo Lead	10	20	7	20	8	20	.....	.....	10	20	.....	.....
Mauhan Lead	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Phœnix Lead & Mining Co	.....	2 50	.....	2 50	.....	2 50	.....	2 50	.....	2 50	.....	.....
Wallkill Lead	25	35	40	.....	75	1 00	90	95	70	1 00	.....	.....
Copake Iron	.....	.....	40	95	50	1 00	40	.....	50	75	.....	.....
Annular Drill	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York and Newark	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eagle Gold	.....	.....	.....	.....	.....	2 50	.....	2 50	.....	2 50	.....	.....
Silver Eagle	.....	.....	.....	2 00	.....	.....	.....	.....	.....	.....	.....	.....
Norwich Copper	.....	.....	.....	1 50	.....	1 50	.....	1 25	.....	.....	.....	.....
Superior Wisconsin	3 00	.....	3 25	.....	3 25	.....	.....	.....	3 25	.....	.....	.....
Schuylkill Coal	.....	.....	3 00	8 00	.....	7 00	.....	.....	.....	9 00	.....	.....
Bullion Consol. Min'g Co	.....	.....	2 50	.....	.....	.....	2 90	.....	.....	.....	.....	.....
Rockland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lake Superior	.....	.....	.....	.....	.....	.....	.....	.....	65 00	.....	.....	.....
Rocky Mountain Gold	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clute Lead	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Isle Royal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foster Iron	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British American Coal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

BOSTON STOCK MARKET.

Reported for the Journal of Mining by Lombard & Co., Bankers & Brokers, Boston.

PETROLEUM

Boston Companies.	May 4. BID.	ASKED.	May 5. BID.	ASKED.	May 7. BID.	ASKED.	May 8. BID.	ASKED.	May 9. BID.	ASKED.	May 10. BID.	ASKED.
Beebe Farm	70	1 00	70	1 00	70	1 00	70	1 00	70	1 00	70	1 00
Boston and Kentucky	.....	40	.....	40	.....	40	.....	40	.....	40	.....	50
Boston Oil Creek Land Co	.....	70	.....	70	.....	70	.....	70	.....	50	.....	50
Boston Petroleum Oil Co	1 00	2 00	1 00	2 00	1 00	2 00	1 00	2 00	1 00	2 00	1 00	2 00
Botolph Oil Well Co	.....	80	.....	80	.....	80	.....	80	.....	80	.....	80
Crescent Petroleum Co	90	1 00	90	1 00	90	1 00	90	1 00	70	1 00	70	1 00
Everett Oil Co	10	14	10	14	10	13	10	13	.....	12	.....	12
" " (Pref. Stock)	1 00	1 50	1 00	1 50	1 00	1 50	1 00	1 50	1 00	1 50	1 00	1 25
Farrar	.....	7 00	.....	7 00	.....	7 00	.....	7 00	.....	7	.....	7 00
Fuller Farm	6	10	6	10	6	10	6	10	6	10	6	10
Great Basin	.....	10	.....	10	.....	10	.....	10	.....	10	.....	10
Indian Spring	10	20	10	20	10	20	10	20	10	20	15	20
Moss, and Oil Creek	12	16	12	16	12	20	12	20	12	20	13	20
New England	9	12	9	12	10	15	10	15	10	15	10	15
New York and Boston	50	1 50	50	1 50	50	1 50	50	1 50	50	1 00	50	1 00
Pepper Petroleum	4 60	5 00	4 60	5 00	4 75	5 00	4 65	4 90	4 50	4 70	4 00	4 50
Pittsburgh and Boston	5	7	5	7	5	7	5	7	5	7	5	7
Tremont	.....	3 00	.....	3 00	.....	3 00	.....	3 00	.....	3 00	.....	3 00
Winthrop	6	10	6	10	6	10	6	10	6	10	4	10
Suffolk and Oil Creek	10	16	10	16	10	16	10	16	10	16	10	15
Independ. of U. S. & C.W	.....	40 00	.....	40 00	.....	40 00	.....	40 00	.....	40 00	.....	35 00
New York Companies.												
Bennehoff Run	11 25	11 35	10 85	11 05	10 65	11 00	10 75	11 00	12 90	13 00	12 80	12 90
Bergen Oil and Coal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bradley	.....	14	.....	14	.....	14	.....	25	.....	25	.....	25
Buchanan Farm	37	38	39	45	39	45	40	42	40	42	41	45
Central	1 90	2 00	1 95	2 10	1 95	2 10	1 80	2 00	1 90	1 95	2 05	2 10
Cherry Run	.....	25	7	25	7	25	10	.....	10	.....	10	25
Consolidated	.....	1 25	.....	1 25	.....	1 25	.....	1 25	.....	1 25	.....	1 25
Empire City	.....	40	.....	.....	.....	.....	30	40	30	40	30	45
Empire and Pit Hole	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Excelsior	75	80	80	90	80	90	80	90	80	90	80	90
First National	.....	.....	10	.....	10	.....	10	.....	10	.....	10	15
Germania	.....	8	.....	8	.....	8	.....	8	.....	8	.....	8
Heydrick	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Highgate	5	10	5	10	5	10	5	10	5	10	5	10
Knickerbocker	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Manhattan	.....	20	10	16	10	16	10	16	10	16	10	17
McKinley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
N.Y., Phila. & Baltimore	.....	.....	.....	.....	.....	.....	.....	50	.....	50	10	50
Northern Light	50	2 00	50	2 00	50	2 00	50	2 50	50	2 50	50	2 00
Oceanic	12	25	10	15	10	15	10	15	10	15	10	15
Oil Creek	65	70	56	60	60	70	60	70	60	70	60	70
Palmer Petroleum	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
President	.....	40	.....	40	.....	40	.....	40	.....	40	.....	40
Pit Hole Creek	2 30	2 40	2 05	2 25	2 00	2 25	2 00	2 25	1 90	2 00	1 90	2 00
Rynd Farm	26	30	25	30	25	30	25	30	25	30	15	25
Tack	4	8	4	8	4	8	4	8	4	8	5	50
Union	.....	.....	.....	7 50	.....	7 50	1 00	5 50	1 00	5 50	1 00	5 50
United States	9 40	9 50	9 65	9 70	9 90	10 10	9 35	10 00	8 90	9 00	8 25	8 35
Webster	30	60	30	45	30	45	25	35	25	35	26	35
Shade River	55	56	60	65	60	65	55	65	55	65	61	63
Hard Pan	.....	.....	.....	2 50	.....	2 50	.....	2 25	.....	2 50	.....	.....
Quartz Hill Gold	4 50	4 60	4 60	4 70	4 50	5 00	4 65	5 00	4 50	4 60	4 50	4 60
Smith & Parmelee Gold	9 55	9 60	9 40	9 60	10 00	10 50	10 00	10 50	10 00	10 10	10 25	10 40

COAL.

Companies.	May 4. BID.	ASKED.	May 5. BID.	ASKED.	May 7. BID.	ASKED.	May 8. BID.	ASKED.	May 9. BID.	ASKED.	May 10. BID.	ASKED.
Belmont	3 50	4 50	3 50	4 50	3 50	4 50	3 50	4 50	3 50	4 50	3 50	4 50
Butler	.....	35	.....	35	.....	35	.....	35	.....	35	.....	.....
Bear Valley	10 00	10 50	10 00	10 50	10 00	10 50	10 00	10 50	9 00	10 00	9 00	10 00
Continental	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Franklin	7 50	9 00	5 50	9 00	7 50	9 00	7 50	9 00	7 00	9 00	7 00	9 00
Gilberton	30 00	30 00	30 00	30 00	30 00	30 00	30 00	30 00	20 00	30 00	20 00	30 00
Glenville	8 00	8 75	8 00	8 75	8 00	8 75	8 00	8 75	7 00	8 75	7 00	8 75
Harleigh	40 00	50 00	40 00	50 00	40 00	50 00	45 00	50 00	45 00	50 00	50 00	60 00
Lackawana	8 00	.....	.....	7 50	.....	7 50	.....	7 50	.....	7 00	.....	7 50
Lorberry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Locust Dale	20 00	25 00	20 00	25 00	20 00	25 00	.....	20 00	.....	20 00	.....	20 00
Mammoth Vein	2 50	2 88	2 75	3 00	2 75	3 00	2 75	3 00	2 50	2 75	2 50	2 60
Mount Pleasant	20 00	21 75	20 00	23 00	20 00	23 00	20 00	25 00	20 00	24 00	20 00	24 00
Potomac	.....	6 25	.....	6 25	.....	6 25	.....	6 25	.....	6 25	.....	6 25
Short Mountain	20 25	24 00	20 25	22 00	22 00	23 00	24 00	28 00	22 00	.....	23 25	.....
Washington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

MINING.

Companies.	May 4. BID.	ASKED.	May 5. BID.	ASKED.	May 7. BID.	ASKED.	May 8. BID.	ASKED.	May 9. BID.	ASKED.	May 10. BID.	ASKED.
Albany and Boston	..	..	..	15	..	14	..	14	..	14	..	14
Bay State	11	..	..	11	10 3/4	11	10 3/8	10 5/8	10 1/2	10 7/8	10 3/4	11
Boston	..	..	..	1	1/2	1	1/2	1	3/8	..	5/8	..
Central	30	40	30	40	..	41	35	40	..	40	..	..
Concord	3 1/2	4	3 1/4	4 1/4	3 1/2	4 1/4	..	4 1/4	..	4 1/4	3 1/8	..
Copper Falls	42 1/4	..	42	..	41	42 1/2	42	43	43	44	43 1/2	44
Franklin	41 1/2	..	41 1/2	41 3/4	41 1/2	42	41 1/2	..	41 5/8	43	42 1/2	42 1/2
Hancock	19 1/4	..	18 1/2	20	18 1/2	19	19	19 1/2	19	19 1/2	19 1/2	19 3/4
Humboldt	..	6 3/4	..	6 3/4	6	6 3/4	..	6 3/4	6	7	6	7

PRICES OF ASSAYING IMPLEMENTS.

Smelting Furnaces	$35 00@ 40 00
Cupelling "	35 00@ 40 00
Scales	10 00@ 30 00
Assay Balances and Weights	100 00@200 00
Plumbago Crucibles	25@ 1 50
Paris "	15@ 1 25
Porcelain Evaporating Dishes	25@ 5 00
Fire Tongs	75@ 3 50
Hammers	1 00@ 2 50
Funnels	15@ 1 00
Litmus Paper, quire	1 00@ 1 25
Ingot Moulds	1 25@ 3 00
Flasks, Bohemian Glass	15@ 1 00
Sand Baths, Iron	25@ 1 00
Pivers	50@ 2 00
Mortar and Pestle, Iron, Agath, etc	50@ 20 00
Lamps, Gas and Alcohol	75@ 5 00
Blowpipes	50@ 3 00
Hydro-Oxygen Blowpipes	25 00@125 00
Pincers, or Cutting Pivers	75@ 1 50
Glass Tubes, German, etc., per lb	75@ 1 50
Muffler	50@ 1 50
Anvils	1 00@ 2 00
Cupel Moulds	3 50@ 5 00
Cupels, per doz	50@ 3 50
Bone Ash, per lb	25@ 50
Test Lead "	50@ 75

CHEMICALLY PURE PREPARATIONS USED IN THE VOLUMETRIC ASSAY.

Acid, Acetic	$0 75 lb
" Arsenious	0 05 oz
" Hydrochloric	0 50 oz
" Nitric	0 60 lb
" Oxalic	0 20 oz
" Sulphuric	0 75 lb
Ammonia	0 60 lb
Baryta, Carbonate	0 20 oz
" Hydrate	0 40 oz
" Nitrate	0 12 oz
Barium, Chloride	0 12 oz
Copper, Sulphate	0 10 oz
Iodine	0 75 oz
Iron, Sesquichloride, Cryst	0 25 oz
Lead, Nitrate	0 10 oz
Mercury, Peroxide	0 20 oz
" Protonitrate	0 25 oz
" Chloride	0 20 oz
Potassa, Carbonate	0 25 oz
" Bichromate	0 15 oz
" Bichromate, Fused	0 20 oz
" Chromate	0 15 oz
" Hydrate	0 40 oz
" Ferrocyanide	0 25 oz
" Permanganate	0 18 oz
" Sulphate	0 10 oz
Silver, Nitrate	Gold 1 10 oz
Soda, Acetate	0 10 oz
" Carbonate	0 10 oz
" Hydrate	0 20 oz
" Phosphate	0 10 oz
Sodium, Chloride	0 10 oz

NEVADA STOCKS.

SAN FRANCISCO QUOTATIONS.

LATEST BY MAIL.

NAME.	FRIDAY, April 14.		Sales for week Ending April 15.	
	Open'g	*Clos'g*	*Shares.*	*Amount.*
Sierra Nevada	$ 9¾	$ 9¾	244	$ 3,164 00
Imperial	150	152	980	140,586 00
Gould & Curry	.....	.....	.....	.....
Chollar—Potosi	377½	375	243	100,841 00
Yellow Jacket	890	842½	160	145,629 00
Bullion	112	112	123	14,397 00
Crown Point	.....	.....	22	$0,775 00
Belcher	335	360	124	45,891 00
Overman	72½	77	751	59,335 00
Ophir	800	830	293	241,965 00
Hale & Norcross	.....	.....	23	22,025 00
Exchequer	10	10½	476	7,113 00
Savage	.....	.....	53	57,512 00
Empire Mill	200	200	31	6,202 00
Alpha	.....	.....	5	2,200 00
Blue Ledge	2½	2½	115	362 00
Lady Bryan	.....	.....	.....	.....
Davey	14	15	341	4,952 00
Caledonia Tunnel	.....	.....	38	152 00
Segrigat'd Belcher	.....	.....	40	640 00
Real del Monte	.....	.....	.....	.....
Confidence	37½	38	214	8,554 00

LATEST BY TELEGRAPH.

SAN FRANCISCO, May 9.

Name.	Bid per foot.	Name.	Bid per foot.
Gould & Curry	990	Crown Point	1325
Savage	1040	Yellow Jacket	720
Chollar—Potosi	335	Belcher	340
Ophir	805	Alpha	340
Hale & Norcross	960	Imperial per share	135

NEW YORK METAL MARKET.

(CORRECTED WEEKLY.)

ANTIMONY	Regulus, ₱ lb	$ 00 13	@$ 00 14
	Crude	.. ..	.. ..
BORAX		.. 35	.. ..
BRIMSTONE		67 50	72 50
COPPER—Ingot	Lake Superior, ₱ lb., cash	.. 28	.. 29
	Baltimore	.. ..	.. ..
	Pig Chili	.. 28	.. ..
	Bolts	.. 45	.. ..
	Braziers	.. 45	.. ..
	Sheathing	.. 45	.. ..
	Yellow metal	.. 34	.. ..
IRON—Pig	No. 1 Scotch, ₱ ton	42 50	45 00
	No. 1 American	42 00	44 00
	No. 2 "	38 00	40 00
	No. 2 Charcoal	.. ..	.. ..
Bar	Swedish, ordinary sizes	150 00	.. ..
	Amer. and Eng refined	115 00	120 00
	" " common	105 00	110 00
	Rails, American currency	.. 85	.. ..
	" English gold	.. 56	.. ..
	Horse shoe iron	140 00	147 00
	Rods 5-8 and 3-16rd. and sq.	122 50	185 00
	Band	145 00	.. ..
	Rail rods, 5-8 and 3-16	122 50	185 00
	Hoops	145 00	215 00
	Sheets, Russian, ₱ lb	.. 31	.. 32
	" English "	.. 7	.. 9
	" American "	.. 25	.. ½
	Boiler Plates, English	.. ..	.. ..
	" American	.. ..	.. ..
STEEL	Best cast in bars, war	.. 22	.. ..
	Best sheet cast, "	.. 22	.. ..
	Best cast circular saw plates 46 in.	.. 28	.. ..
	Double shear steel, war	.. 22	.. ..
	Single " " "	.. 19	.. ..
	Montague & Co. C. S., in bars	.. 19	.. ..
	Round machinery cast	.. 15	.. ..
	Best German	.. 15	.. ..
	Government German	.. 12	.. ..
	Eagle German	.. 13	.. ..
	(L.) Blister, war	.. 19	.. ..
	W. Jessop & Sons, blister, war	.. 16	.. ..
	Double refined	.. 24	.. ..
	Stone Axe shapes	.. 24	.. ..
	Common blister	.. 13	.. ..
	2d quality sheet	.. 19	.. ..
	3d quality sheet	.. 16	.. ..
LEAD	American, per 100 lbs	.. ..	.. ..
	German	8 25	8 45
	Spanish	8 25	8 45
	English	8 25	8 45
	Bar, per 100 lbs	8 50	.. ..
	Pipe and sheet	11 50	.. ..
TIN	Banca Gov., per 100 lbs. gold	22 50	23 00
	Straits	21 00	21 50
	English	21 00	.. ..
TIN PLATES	IC 10-14 prime charcoal	13 50	13 75
	IX 10-14 " "	16 75	.. ..
	IC 12-12 " "	14 50	.. ..
	IX 12-12 " "	17 25	.. ..
	IC 14-20 " "	15 00	.. ..
	IX 14-20 " "	17 75	.. ..
	IC 14-20 Roofing ch. 1st	13 00	.. ..
	IC 14-20 " " 2d	12 00	.. ..
	IC 14-20 " Coke	9 75	.. ..
	IC 10-14 Coke	11 25	11 50
SPELTER	Lehigh, per lb., currency	.. 11	.. 12
	Foreign " gold	.. 7	.. 7¼
ZINC	Mussulman & Amer	12½	.. 13
SOLDER	No. 1	.. 25	.. ..
	No. 2	.. 22	.. ..
QUICKSILVER		.. 80	.. ..

LONDON METAL MARKET.

LONDON, April 27, 1866.

		£.	s.	d.	£.	s.	d.
COPPER	Best selected, per ton	94	0	0	@ ..	..	..
	Tough Cake & Tile, per ton	91	0	0	..	..	..
	Barra Burra " "	93	0	0	..	..	..
	Copper wire, per lb	0	0	12	..	..	..
	" tubes, " "	0	0	12¾	..	..	..
	Sheathing & Bolts, per ton	96	0	0	..	..	..
	Bottoms, " "	101	0	0	..	..	..
	Old (Exchange)	82	0	0	..	..	..
IRON	Bars Welsh in London	7	10	0	8	0	0
	Do. to arrive	7	10	9	7	12	6
	Nail rods	8	7	6	9	5	0
	Do. Stafford in London	8	15	0	8	17	6
	Bars " "	8	15	0	10	0	0
	Hoops " "	9	15	0	10	10	0
	Sheets, single	10	7	6	11	0	0
	Pig No. 1 in Wales	4	5	0	4	10	0
	Refined Metal, do	4	0	0	5	0	0
	Bars Common do	6	15	0	7	5	0
	Do. Merch. Tyne or Tees	7	10	0	..	..	..
	Do. Railway in Wales	6	10	0	6	15	0
	Do. Swede in London	11	10	0	..	..	..
	To arrive	11	10	0	..	..	..
	Pig No. 1 in Clyde	3	19	6	4	8	6
	Do. f. o. b. Tyne or Tees	2	9	6	..	..	..
	Do. Nos. 3, 4, f. o. b. Do	2	6	6	2	7	6
	Railway Chairs	5	10	0	5	15	0
	Do. Spikes	11	0	0	12	0	0
LEAD	English Pig Common	21	0	0	..	..	..
	Do. ordinary soft	21	7	6	21	10	0
	Do. (W. B.)	21	15	0	..	..	..
	Do. Sheet	21	15	0	..	..	..
	Do. Red Lead	23	10	0	24	0	0
	Do. White	27	0	0	30	0	0
	Do. Patent Shot	23	15	0	24	0	0
	Spanish	20	5	0	20	10	0
STEEL	Swedish in kegs, rolled, p ton	13	0	0	14	0	0
	Do. hammered	15	0	0	16	0	0
	Do. in faggots	16	0	0	16	10	0
	English Spring	19	0	0	23	0	0
QUICKSILVER	Per bottle	7	0	0	..	..	..
SPELTER	Foreign, per ton	23	10	0	..	..	..
	To arrive " "	23	10	0	..	..	..
ZINC	In Sheets	30	0	0	..	..	..
TIN	English Blocks	91	0	0	..	..	..
	Do. bars in barrels	92	0	0	..	..	..
	Do. refined	94	0	0	..	..	..
	Banca	80	10	0	..	..	..
	Straits	78	0	0	79	0	0
TIN PLATES*	IC Charcoal, 1st qu., per box	1	15	0	..	..	..
	IX Do., 1st quality "	2	1	0	..	..	..
	IC Do., 2d quality "	1	13	0	..	..	..
	IX Do., 2d quality "	1	19	0	..	..	..
	IC Coke	1	8	0	1	9	6
	IX Do.	1	14	0	1	15	0
	Canada Plates, per ton In London; 20s. less at the works.	13	0	0	..	..	..
YELLOW METAL	Sheathing, p. lb	0	0	9	..	..	..
	Sheets, per lb	0	0	9	..	..	..
INDIAN CHARCOAL	Pigs in London	7	0	0	7	10	0

* At the works, 1s. @ 1s. 6d. less.

FEDERAL SECURITIES.

LOANS. INTEREST PAYABLE IN GOLD.	AUTHORIZING ACTS.	AMOUNT OUTSTANDING.	RATE.	PRIN. PAY.	INTEREST.	WHEN PAYABLE.		OFF. PER CENT.	ASKED PER CENT
Registered Bonds	28 January, 1847	$9,415,250	6	1867	$564,915	Jan.	July.	121	121
Coupon "									
Registered Bonds	31 March, 1848	8,908,342	6	1868	534,500	Jan.	July.	116½	117¼
Coupon "								116½	
Registered Bonds	22 June, 1860	7,022,000	5	1871	351,100	Jan.	July		
Coupon "									
Registered Bonds	14 June, 1858	20,000,000	5	1874	1,000,000	Jan.	July.		
Coupon "									
Bonds, March 3, 1863		.....	6	1881	.....				
Oregon War Debt		.....	6	1881	.....	Jan.	July.		
Registered Bonds	8 Feb. & 17 July & Aug., 1861	283,715,650	6	1881	.....	Jan.	July.	109⅛	109¼
Coupon "									
Registered "	25 February, 1862 (5-20's)	514,780,500	6	1882	30,886,830	May	Nov.	102	102⅜
Coupon "									
Registered "	(5-20's) new issue	100,000,000	6	1884	6,000,000	May	Nov.		
Coupon "									
Bonds, March 3, 1865		65,175,500		1885	.....				
Registered "	(10-40's)	171,219,100	5	1904	.....	Mar.	Sept.	95¾	
Coupon "									
Total April 1		1,180,236,342							

LOANS. INTEREST PAYABLE IN LAWFUL MONEY.	AUTHORIZING ACTS.	RATE.	AMOUNT OUTSTANDING.	PRINCIPAL PAYABLE.	INTEREST.	WHEN PAYABLE.		OFF.	ASKED.
Bonds, Cent'l P. R. R. Co., July 2, 1864		6	$2,362,000 00	1895	$1,898,000 00	Jan.	July		
Bonds, Union P. R. R. Co., July 2, 1864		6	1,632,000 00	1895	.....			.....	.....
Temporary Loan		4	.....	10 days' notice	.....			.....	.....
Temporary Loan		5	.....	10 days' notice	.....			.....	.....
Temporary Loan		3	18,576,959 00	10 days' notice	.....			.....	.....
Certificates of Indebtedness, March 1, 1862		6	62,208,000 00	1 yr from date	.....	1 yr. fr. date		.....	
1 and 2 Years' Notes, March 3, 1863		5	8,536,900 00	.....	.....	1 yr. fr. date		.....	.....
3 Years' Compound Interest Notes	March 3, 1863	6	172,012,141 00	3 yrs from date	.....	At maturity			
	June 20, 1864								
	June 30, 1864								
3 Years' Treasury Notes	March 3, 1865	7.3	.....	3 yrs from date	21,900,000 00	Aug.	Feb.	102¼	102⅛
3 Years' Treasury Notes, March 3, 1865		7.3	817,014,000 00	3 yrs from date	21,900,000 00	June	Dec	102¼	102⅜
3 Years' Treasury Notes, March 3, 1865		7.3	.....	3 yrs from date	16,790,000 00	July	Jan.	102¼	102⅜
Aggregate of Debt Bearing Lawful Money Interest, April 1			1,064,455,041 00	Total Interest					

Sodium Amalgam.

Sodium amalgam has been pretty well known for about sixty years. Several distinguished chemists, among whom was Sir Humphrey Davy, at the beginning of this century, busied themselves with studying it, and it was reasonably supposed that nothing of importance would be added to what they taught us of its properties. Yet the fact is that quite recently we have learned something about sodium amalgam that is practically worth more than all that we previously knew. It will now be taken out of the old curiosity shop and put in the market place; instead of being only a source of amusement and instruction to beginners in chemistry, it will minister to one of the strongest desires of men. Sodium and mercury being both metals, have a wonderful affinity for each other. When they are brought together, there is a grand clash of atoms, so Prof. Tyndall would express it, and there is smoke and loud sounds, and flame, and intense heat; the experiment is a dangerous one, unless made on a very small scale. When the sodium amalgam is brought into contact with almost any metallic salt, the sodium seizes the oxygen, chlorine, or sulphur, and the mercury lays hold of the metal; in this way amalgams of iron, platinum and other metals which ordinarily do not combine with mercury, may be made. If sodium amalgam be put into a solution of sal-ammoniac, the amalgam, without losing its metallic appearance, increases prodigiously in size, and reminds one now-a-days of Pharaoh's serpents; this curious experiment suggested the famous ammonium theory, which is discussed in every text book on chemistry. A very little sodium makes a solid amalgam; 1 part sodium to 50 parts mercury, gives a consistency of butter; 1 sodium to 30 mercury gives a solid, not so tough, but otherwise much resembling zinc. But these facts are not new, and we proceed to those which are the object of this article. Dr. Henry Wurtz, now of this city, but formerly of the Patent Office, is the discoverer of the new uses of sodium amalgam. From patent examiner, he has became an inventor; we congratulate him on his auspicious beginning. Dr. Wurtz has found that when a very little sodium is added to ordinary mercury, the affinity of the mercury for metals generally is so increased, that for use in the arts this mixture acts almost like a new substance. Gold and silver miners have long complained that their mercury was too feeble in solvent power, was liable to "flour" and to get "sick," etc.; that the gold is often in a condition, as in Colorado, where it slips through the fingers of any device set to catch it. Dr. Wurtz's invention is said to be a complete remedy for all these ills. Whenever sodium amalgam touches gold it sticks to it and does not let it go; it sticketh like a brother; to gold and silver it is as adhesive as tar to a contraband. Sodium amalgam is sometimes called magnetic amalgam. Dr. Wurtz has found other uses of sodium amalgam; we have space only to allude to them. He proposes to solidify mercury by means of sodium, and transport it in solid blocks, and when the mercury is to be used, the sodium is removed by a simple process. If a broom be made of iron wire, and charged with the amalgam, it is very useful for sweeping together mercury which has been spilled. Every little particle sticks to the broom, from which it may be shaken off at pleasure. An iron brush may be used like a paint brush, in amalgamating zinc plates for the battery, etc. Mr. William Crookes, the able editor of the *Chemical News*, appears independently to have discovered the useful proprieties of sodium amalgam. But there is little doubt that Dr. Wurtz is the original and first inventor. He antedates Mr. Crookes eight months by his patent, and there is evidence that he has been investigating the subject for several years.—*Scientific American.*

Iron Smelting in Colorado.

The business of Iron smelting may now be said to be fairly inaugurated in Colorado. The Belmont furnace is in operation near Denver, and is turning out two tons of pig iron per day. The ores used are pronounced by competent judges to be the best in the world, and are excelled in richness only by the Pilot Knob and Lake Superior ores; but possess an advantage over these in the fact that they can be easier and more economically worked. The supply of ore is deemed inexhaustible, and is easily obtained, one man being able to mine three tons of it in a day.

Patent Claims.

Interesting to Miners, Millmen, Metallurgists Oil-Men and Others.

The following claims have recently been issued from the United States Patent Office :

54,349.—Grate Bar.—David Houston, New York city :
I claim, and desire to secure, by letters patent, the bearing bar, b, connected to the grate bar, a, at or near its centre, and resting at its ends upon the same bearers as the ends of the bar, a, but disconnected from said bar, a, at its ends so as to allow the grate bar to expand independently of the bearing bar, as set forth.

54,376.—Annealing Box.—James E. Lewis, Sharpsburg, Pa. :
I claim constructing cast iron annealing boxes, as described, having the body of the box in a separate piece from the bottom and top, or cover, for the purpose of preventing its warping by the action of the annealing oven.

64,409.—Furnace.—George E. Reynolds, Philadelphia, Pa. :
I claim a detachable block, H, adapted to the fore plate of a furnace, substantially as and for the purpose herein set forth.

45,412.—Method of Extracting Precious Metal from Ores. Van Buren Ryerson, New York city :
I claim the process of decomposing sulphurets found in admixture in the ores of gold and silver, by subjecting said ores in the pulverized or granulated state to the action of superheated steam, so as to convert the sulphurets in sulphates and sulphites, substantially as and for the purpose described.
And I also claim, in combination with the said process for decomposing said ores, the process substantially as herein described, of amalgamating the particles of precious metals with mercury.

54,413.—Atmospheric Hammer.—John Robertson, New York city :
First, I claim, in combination with the cylinder hammer head and piston, applied and operating as herein before specified, the provision for raising and lowering the piston rod, and shortening or increasing its effective length while the hammer is in operation, substantially as herein set forth.
Second, I claim, in combination with the hammering apparatus, constructed as described, a variable crank, substantially as shown.

54,414.—Apparatus for Refining Petroleum—William H. Sangster, Buffalo, N.Y. :
First, I claim the partition, A, or its equivalent, when constructed as and for the purpose herein substantially described and set forth.
Second, In combination therewith, the plate B, or the equivalent thereof, as and for the purpose described.

54,415. — Grate Bar.—Horace B. Scofield, New York city :
I claim a grate bar for furnaces, formed with a straight upper surface, and a rib on its under side, corrugated in the manner and for the purposes specified.

54,440.—Machine for Bending Tubes.—James Sweeny, St. Louis, Mo. :
First, I claim the combination of the beam, A, having a mortise, a, in it, with the screw, f, when constructed as and for the purpose set forth.
Second, I claim the sheaves, d d, in combination with the chain, g, or its equivalent, and the screw, f.

54,442.—Magnesium Lamp.—Robert H. Thurston, Providence, R.I. ;
First, I claim the use of the feed roller, B, as a surface on which to burn a strip or wire of magnesium, substantially as described.
Second, The combination of the stationary scraper, K, with the roller, B, substantially as described and for the purposes specified.

54,454.—Rock Drill.—Charles Hunter Webb, San Francisco, Cal. :
I claim the arrangement at an angle of 45 deg. of each end of the back of the cutters or dies, together with the arms or guides thereof, at the same angle of 45 deg. of each edge of the wedge by which the cutters or dies are driven at its points of contact with the cutters or dies, and also at the same angle of 45 deg. of the various slots in which the cutters or dies are made to traverse in their propulsion by the blow toward the rock and their recoil therefrom, each separately and the whole collectively for the purpose described, namely, the effective delivery of the blow with the least amount of friction.

54,470.—Cupola Furnace.—Charles Truesdale (assignor to himself and Wm. Resor & Co.,) Cincinnati, Ohio :
First, I claim the provision in a cupola or melting furnace of one or more vertical series of tweers with graduated or decreasing vantages toward upper portion of the series, substantially as set forth.
Second, The arrangement of one or more vertical series of tweers which project beyond the common or general lining wall, and are protected by vertical pliers, substantially as set forth.

All Sorts.

☞ A fashionable but ignorant lady, desirous of purchasing a watch, was shown a very beautiful one, the shopkeeper remarking that it went thirty-six hours : "What, in one day !" she asked.

☞ The coal trade at Richmond, Penn., is suspended in consequence of the determination of the laborers to resist any reduction of wages. No disturbance has yet occurred.

☞ A little boy being told by his mother to take a powder she had prepared for him, "Powder, powder !" said he, putting on a roguish smile, "mother, I ain't a gun !"

☞ A musical critic, speaking of the vocal performance of a singer, said, "We hang upon every note !" a remarkable proof of the singer's power of execution.

☞ At a trial recently, a Cornish jury returned the following verdict : "Guilty, with some little doubt as to whether he is the man."

☞ An immense shark was killed by whalemen near Monterey, the other day. He measured 23 feet in length.

☞ Somebody announces, as the latest telegram from Rome, that the Pope's bull has got the rinderpest.

☞ The Chilian Government has obtained a loan of $6,000,000 from Baring Brothers, of London.

☞ Maximilian is about to issue $20,000,000 of paper currency

Mineral and other On-dits.

☞ It is asserted by competent geologists that the supply of coal in England is in process of rapid exhaustion. According to measurements and underground explorations down as deep as four thousand feet below the surface of the earth, only eighty millions of tuns remain. This amount of coal was consumed in 1860. The consumption of the mineral increases, we are told, at the rate of three and a half per cent. per annum Mines could not be worked at all at the depth of 4,000 feet. The coal-fields of England are in extent but 5,400 square miles, and it is estimated that these fields will be entirely exhausted in less than a thousand years. Our coal-fields are 194,000 square miles in area. It must be said, however, that the probabilities are that when coal is used up in England, science will have discovered a substitute that will answer for the use of manufacturing industry and commercial intercourse.

☞ An exchange gives the following statement of the yield of Virginia City and Gold Hill, Nevada : "The total amount of ore taken out in Virginia and Gold Hill per day is 1,435 tons ; per month, 43,050 tons. Value per day, $45,050 ; per month, $1,291,500. In our estimating the productions of our mines we have not taken any outside of the two cities. The Belcher, Apple, Overman and Uncle Sam are all taking out pay rock, as well as several others. We ask, where can another place be found, that, one mile in length, the same amount of money is taken out of the ground ? And we all know that, at the present time, there is not one-half the amount of ore being taken out that will be in the course of three months. In fact, not one-half af the ground is being worked at the present time.

☞ To make a cast-iron magnet, take a smooth bar of cast-iron, place the middle of it to the north pole of a magnet and draw it to the end, repeating the stoke always from the middle to the end, and rubbing in the same way each time. Then place the middle of the bar to the south pole of the magnet and rub toward the opposite end of the bar, repeating as before. Magnets can be made in this way of steel as well as of cast-iron, and may be in the form of a horse-shoe or star, as well as a straight bar.

☞ Certain persons have discovered a veritable diamond mine somewhere in the vicinity of the Table mountains, to the west of Mesilla valley. The specimens are said to have been pronounced genuine by those engaged in the diamond trade of San Francisco. Diamonds have been found at Cherokee, and it is not improbable that they have been discovered elsewhere.

☞ Leibig suggests that, in close rooms and on ship board, deficient ventilation may be compensated for by the use of hydrate of lime. Eighteen or twenty pounds of slaked lime will absorb thirty-eight or thirty-nine cubic feet of carbonic acid gas, which would be immediately replaced by an an equal volume of fresh air entering through the crevices.

☞ The Chicago and Great Eastern Railway Company has recently adapted the use of passenger cars wholly constructed of iron.

☞ The petroleum excitement which broke out some time since in Alabama, seems to be on the increase.

☞ Rich silver mines, it is said, have been discovered in Hanover county, Va.

Special Scientific Brevities.

☞ We understand that Mr. Grant's Trans-mongolian telegraphic scheme is already so far advanced as to give reason to believe that we may expect to receive telegrams by the first steamer from Tientsin after the breaking up of the ice. Mr. Grant, we are informed, will leave per Corea steamer for Taku, whence he will proceed to Kiatcha, with the purpose of forming the line of couriers between Kiatcha and Tientsin.—*China Mail.*

☞ The beauty of the Abbe Liszt's Sinfonia of Dante is said to have driven the lovers of music in Rome half crazy. When Sgambati went to crown his master, there was an amiable struggle between himself and the Abbe, but the matter was compromised by an embrace and a kiss.

☞ A lady who had read of the extensive manufacture of odometers, to tell how far a carriage has run, said she wished some Connecticut genius would invent an instrument to tell how far husbands had been in the evening when they just step down to the post-office.

☞ Sir Edwin Landseer has completed the model of two of the lions intended for the base of the Nelson Monument, in Trafalgar square, London, and the arrangements for the founding in bronze are about to be commenced.

☞ In Paris, lamps are to be immediately erected at the corner of every street, with blue glasses, having upon them the names of the streets in bold letters, so as to be easily read at night time.

☞ An agricultural writer says of the children's favorite, pop-corn, that it abounds in phosphate of lime, just the thing to furnish material for their growing bodies and brains. It is very easily digested.

☞ H. J. Ellicott, a youth of eighteen, has executed in plaster, a life-size statue of Mr. Lincoln, which has been placed in the Capital Rotunda, where it attracts much attention.

☞ Some experiments made at the Experiment Grounds at Washington, seem to show that a small covering, a mere board, over grape vines, prevents mildew.

☞ The Mobile papers report the arrival of a great curiosity at that city, a vessel made entirely of cork, which is lying at one of the wharves.

☞ The Suspension Bridge at Cincinnati will be the longest in the world, its total span being 3,171 feet.

☞ The Philadelphia Academy of Art was opened Monday. The collection of pictures is fine.

MINING COMPANY MEETINGS.

THE KNICKERBOKER GOLD MINING COMPANY OF COLORADO will hold their regular annual meeting at the office of the Company, 78 Broadway, N. Y., on May 15, 1866, at 12 o'clock M., for the election of Trustees, &c.

THE MARIETTA MINING COMPANY WILL HOLD THEIR ANNUAL meeting for the election of Trustees, at the office of Allan Hay, 33 Broad street, N. Y., on June 5th, 1866, at 12 M.

THE MAMMOTH GOLD MINING COMPANY OF COLORADO will hold their annual meeting for the election of Directors, etc., at the office of the Company, 69 Liberty street, N. Y., on May 16th, 1866, at 12 M.

THE CUMBERLAND COAL AND IRON COMPANY WILL HOLD their annual meeting for the election of a President and Directors, etc., at the office of the Company, 90 Broadway, N. Y., on June 4th, 1866, at 12 M.

Historical Sketch of Metallurgy.

Gold, silver, copper, lead and iron, are the metals most anciently known, but the precise time of their discovery cannot now be ascertained. According to Lucrece, the discovery of metals is due to the burning of certain woods, which melted the ore contained in the soil. Strabo regarded that idea as absurd. Pasidonius attributed the discovery of mines to a circumstance almost fabulous. He thinks the earth was liquified by the burning of the forests, which produced at the surface the ores of gold, silver, etc., contained in its various depths. According to Aristotle, it was shepherds who set the woods on fire. Diodorus of Sicily, in speaking of the Pyrenees mountains, says : "Formerly they were covered with thick woods, but some shepherds having set them on fire, they were entirely consumed. The fire lasted several days, and the earth was burnt up. It was for that reason these mountains were called Pyrenees (from the Greek $\pi\upsilon\rho$). Streams of refined silver were run from the earth." Cadmus is said to be the first who discovered gold. Some authors attribute its discovery to Thoas of Thrace ; others to Mercury, son of Jupiter ; others to Pisus, King of Italy, who having left his country, went to Egypt, where he was chosen King after the death of Mizraim, and received the surname of *God of Gold*, on account of his discovery. Others say that Eaclis or Cœcus, son of Jupiter, or Sol, son of Oceanus, was the first who discovered gold. Eschyles thinks that Prometheus not only discovered gold but also other metals. Polybius says it was a certain Auletus who discovered the silver mines of Spain. The upper and copper mines of the island of Cyprus were discovered by Cynira, son of Agryopa ; and if we believe Hesiod, it was Cres, King of the island of Creta, who discovered iron mines in the mountains of Cereciuthia. According to some authors, Midacrites was the first who began the extraction of lead and tin in the island of Eassiteris. The Scriptures attribute the discovery of copper and iron, or rather the method of working them, to Tubal Cain, who lived long before the flood. The metals most known were those which presented themselves the most readily, were the most easily reduced to the metallic state, and were found the nearest to the surface of the earth. Gold and silver were the first metals discovered in Spain. Tin, in Cornwall, England, was without doubt the first metal worked in Great Britain, and probably the first article of trade between that country and other nations. This was due probably to the circumstance that tin ore by its weight indicates its properties, is decomposed by a light heat, and that it is found near the surface of the soil. Traces of the old searches are found in locations where the soil could be easily and quickly dug ; where it could be readily reached by streams purposely directed upon it, and which, carrying away with them the vegetable earth, left tin ore, retained by its own weight. That method, which was an ingenious improvement on the first works, was again followed in certain explorations called *stream works*, and all evidence shows it to be of the greatest antiquity. Lead was probably mined as early as tin. It is usually found near the surface. It also presents a metallic aspect, and is easily transformed into metal by a moderate heat. Copper is generally found at a considerable depth, and the proportion of copper in the generality of ores is so small that the art of mining had made material progress before that metal could be extracted from the earth. Having discovered the properties of ores, and the processes of smelting them, the method was then found to extract them from the earth, and follow the veins which contained them. At first this could be easily done where the elevation of mountains permitted the miners to work at a height sufficient to enable them to direct the water, and carry on the work of exploration by means of little canals, where the rock was not hard enough to resist their imperfect tools or the action of fire, which in many cases produced little effect. From the simplest operations, man has been gradually conducted in the explorations of metals to the most complete and extraordinary exertions. First, it is evident, not only from the probability of things, but also from inspection of the old works of mining in every country, that the metals were at first extracted from broken pieces of ores, which had been by some unknown cause separated from the veins in which they were deposited. It is thus that gold is obtained by the washing of the sand of rivers, and that tin is found under beds of sand in the valleys of Cornwall and Devonshire, [G. B.] The search for these pieces of ore led naturally to the discovery of the veins in which they were contained, and in digging the soil to procure these pieces the vein was discovered. The first miners, without doubt, proceeded in this way, but the little means they possessed forbade them carrying their works to any considerable distance below the surface. It was only after the application of pumps to exhaust the water that they could go to a certain depth, and later the discovery of powder enabled them to open a road through the hardest rocks. These discoveries formed important epochs in the history of the art of mining, for since man had at his disposition these two powers—powder and pumps—neither rapid streams of water nor the hardest rocks have been obstacles to his subterranean march ; and his explorations have extended wherever ore was to be found. The first im-

portant epoch in the history of mining dates from the use of powder. It was first used in Hungary or Germany about the year 1620; introduced into England in the copper mines of Ecton in 1670, by some German miners brought up by Prince Rupert; thence it extended to the Somersetshire mines in 1684, and afterwards to those of Cornwall. It is very probable that it would have been impossible to work mines without this power, and, till it was used, subterraneous operations were very difficult and uncertain. Hammers and sledges were the first instruments used to attack the rock; later, the pickaxe was substituted. Several oak tools have been found in Cornwall, and miners think they were used by Saxons and Danes; but it is probable they date from an epoch anterior to either of these two nations. When mining is carried to a certain depth, the withdrawal of water cannot be done with simple hand-machines, and hydraulic power must be applied. Pumps were erected in wells, and put in motion by water-wheels. It is to the German miners that we are indebted for this invention. The introduction of the steam engine gave to the art of mining a power susceptible of a general application, and man can now penetrate to a depth which was before impossible to reach.—*Jour. App. Chem.*

Curious Properties of Magnesium Amalgam.

At a recent meeting of the Chemical Society of London Professor Wanklyn read a paper "On Magnesium," detailing some experiments made conjointly by himself and Mr. E. T. Chapman. The authors found the magnesium ribbon of commerce to be remarkably pure, which was proved by the quantities of hydrogen evolved during the solution of known weights of the metal in certain diluted acids. The behavior of the metal in resisting the attack of chlorine, bromine, and iodine, was pointed out, and also the very singular properties of the magnesium amalgam, which decomposed water with even greater facility than sodium amalgam.

Professor Abel mentioned an observation of his own to the effect that magnesium filings might be fused with nitrate or chlorate of potash without immediately undergoing oxidation, and only at a very high temperature, and long after the oxygen had been freely evolved, dit it seem possible to start the ignition and brilliant combustion of the metal. This tardiness was discovered in attempting to employ metallic magnesium for certain pyrotechnic purposes.

WHAT IS SAID OF THE "JOURNAL OF MINING" BY THE PRESS.

From the N. Y. Evening Post, April 4, 1866.

Messrs. Western & Co., 37 Park Row, have begun the publication of the AMERICAN JOURNAL OF MINING. It is a handsomely printed newspaper of sixteen pages, and the first number is filled with valuable articles. Mr. George F. Dawson, the editor, is an experienced journalist, and a man of great industry and activity in the origination and diffusion of knowledge. We believe there is room for a Mining Journal of a higher scope than we have had, and the present sheet looks as though it would meet the public want.

A casual remark in an article on drilling by compressed air shows that our countrymen do not always succeed in keeping themselves first among the foremost, even in the introduction of mechanical improvements:

"By the introduction of compressed air these outlays can be almost entirely avoided. now that we have a power at hand available as steam for doing our mining work, at points where steam cannot be used. We must seek out and set to work the best machinery for drilling the rock and cutting the coal. More than three years of steady work at the Mount Cenis tunnel, and almost as long in English mines, demonstrates the fact that there are machines to be had which will do good work, and have them we must; if our own countrymen cannot furnish them we must import them or be behind the age. Is it not remarkable that in the department of mining and drilling rocks, few, if any, improvements have been made, while in almost all other branches of industry the advance has been marked and regular?"

From the N. Y. Express April 3, 1866.

STATE OF MINING.

The AMERICAN JOURNAL OF MINING, a new paper just published, and a *very acceptable one*, we should think, *to the mining interests of the country*, says, though the season is dull:

"The gold and silver mines of Nevada, Montana, Idaho, Colorado, Arizona, Oregon, New Mexico, never yielded larger returns. Those of California manifested decided symptoms of improvement. The copper product of the great copper region bordering Lake Superior exhibits no decrease; and the coal, iron and lead mines of Pennsylvania, Wisconsin, Illinois, and other States certainly hold their own. Most encouraging accounts as to the mineral wealth of Virginia, Georgia, and others of our Southern States also continue to come in.

"The petroleum product, in spite of the heavy tax imposed upon 'crude,' is growing, and when Congress shall have lifted the galling burden from the producers' shoulders, it must become a highly remunerative branch of mineral industry. The excitement relative to Montana and Idaho does not seem to have been materially affected by the glowing accounts from New Granada; and the more recent reports from the Big Bend mines, in British Columbia, although bearing the imprint of truth, serve but to increase the bent of many adventurous minds to swell the populations of those two favored Territories, as by travelling via San Francisco and Portland, to either Montana or Idaho, they might visit Big Bend without diverging much from their line o travel."

Of the speculative feeling so common and involving heavy losses, it is said, and *most truly*, we think, that:

"Mining can never, as a rule, be profitably conducted, unless as a legitimate business. But as a business it can, without a doubt, be carried on most remuneratively."

From the Messager Franco-Americain, April 4, 1865.

[TRANSLATION.]

We have received the first numbers of a scientific journal which has just been established in New York, called the AMERICAN JOURNAL OF MINING. The new publication concerns itself with the mines of every kind which enrich the soil of America, from the gold mines of California and of Colorado to the mines of petroleum and coal of Pennsylvania. The discription of the different methods of mining, and of the machinery invented by modern genius, are accompanied by wood cuts drawn with care. The text is clear and legible to every one. In fine, as far as may be judged by a first and necessarily very rapid examination, the JOURNAL OF MINING is destined to be of great utility, not only to engineers but to persons of all conditions who, having an interest in mining, wish to get a *compte raisonne* of the chances of gain or loss offered by the different speculations.

From the Mining Journal, Pottsville, Pa.

AMERICAN JOURNAL OF MINING.—This is the title of a neat and interesting sixteen page weekly paper, edited by George Francis Dawson, Esq., and published at 37 Park Row, New York, by Western & Co. It is devoted to general mining matters, and will, we judge from the contents of the first number, pay much attention to gold and silver mining in the West, now attracting investment and immigration. It is a paper that bears upon it every indication of capacity to command success, which we heartily hope it will secure. The subscription price is four dollars a year.

From the N. Y. Atlas, April 14, 1865.

AMERICAN JOURNAL OF MINING.—We have received the first two numbers of a new weekly bearing this title, which promises to supply a much-felt want. The rapid development of the mineral resources of this country that has recently taken place, and the great pecuniary interests thus called into existence, have created a necessity for a reliable journal of the kind, to disseminate mining news, and serve as a medium of communication for all concerned in the mining business. This publication is under the editorial charge of George Francis Dawson, and is issued in unexceptionable style, typographically.

From the Chicago Evening Journal, April 7, 1866.

A NEW MINING JOURNAL.—We have received from the publishers, Messrs. Western & Co., 37 Park Row, New York city, the initial number of the *American Journal of Mining*. It is a handsomely printed weekly of sixteen pages, and is filled with valuable articles. Mr. George F. Dawson, the editor, is an experienced journalist, and a man of great industry and activity in the origination and diffusion of knowledge. We believe there is room for a mining journal of a higher scope than we have had, and the present sheet looks as though it would meet the public want. The subsbription price is $4 per annum.

From the Scientific American.

AMERICAN JOURNAL OF MINING.—This is a neat, well-printed journal, lately started, and devoted, as its title indicates, to mining and kindred matters. It is illustrated and contains full reports of the condition and prospects of the mines in Colorado, California, and other territories. It is published by Western & Co., 37 Park Row, at $4 a year.

From the Reno Times, April 5, 1865.

JOURNAL OF MINING.—The first number of a weekly journal to be devoted to mining interests, has been issued by Western & Co., New York, under the able editorial charge of George Francis Dawson. It contains sixteen pages, published in handsome style, and we hope will meet with abundant success.

From the New Yorker Handels-Zeitung.

[TRANSLATED.]

The first number of the *American Journal of Mining*, edited by Mr. George F. Dawson, is before us and we welcome it. We think the *Journal* has made its appearance just in the right time.

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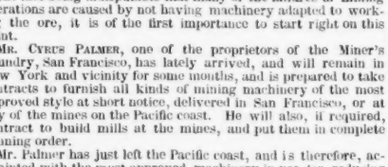

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REFERENCES: Prof. A. A. Hayes, Boston; Gen. A. E. Burnside, Providence, R. I.; S. L. French, Esq., Boston; N. H. S. Lead Co., New York; Black River Mining Co., Boston; H. Williams, Esq., M. E., Canada; Lionel Brough, Esq., Gov. Ins. Mines, London, Eng.; New Hampshire Silver Lead Co., New York; St. Flavien Mining Co.; R. C. Hawkins, Esq., New York and Boston; and others.

OIL LANDS FOR SALE.

Thirteen Thousand Acres of Land,

in the Canada Oil Regions, in the Townships of Enniskillen, Dawn, Zone, Moore, Brooke and Sombra, for sale or to lease, for Oil purposes, in portions to suit purchasers.

For terms and particulars apply to the proprietor.

T. D. LEDYARD, 74 Yonge Street, Toronto.

CONSOLIDATED LINE.

Great Through Route
TO
THE MINING REGION
AND
THE PACIFIC STATES.

The Holladay Overland Mail
AND
EXPRESS COMPANY.

having consolidated the property of the "OVERLAND STAGE LINE" and the "OVERLAND DISPATCH COMPANY"—comprising all the Overland stage lines running west from the Missouri river—and largely increased and improved their stock and coaches, and reduced their rate of fares nearly 25 per cent, will run a

Daily Line of Coaches

to all the principal points in the gold mines of Colorado, Utah, Montana, Idaho, Nevada, California and Oregon.

They are now running daily coaches from TOPEKA, (in connection with the railroad from St. Louis,) via the "Smoky Hill" route; and from ATCHISON, Kansas, (in connection with the Hannibal and St. Joseph Railroad,) and from NEBRASKA CITY and OMAHA, via DENVER CITY, Colorado, to SALT LAKE CITY, in Utah; thence connecting with their line of coaches for Virginia City and Helena, in Montana; Boise City in Idaho; Walla-Walla, Dallas City and Portland, Oregon.

At Denver City, Colorado, connecting with their double daily line of coaches for Central City, Blackhawk and Empire City.

Passengers for New-Mexico and Arizona also connect at Denver, with a tri-weekly line of coaches for Fort Union, Taos, Sante Fe and other points in those territories.

Passengers for Nevada and California connect at Salt Lake City with daily coaches for Austin, Reese River, Virginia City, Nevada, Humboldt and San Francisco, California.

This Company will also, at an early day, run a line of stages from Salt Lake City through the silver mining district of the Parahuagett Valley to Collville, at the head of navigation on the Colorado River.

RATES OF FARE:

Between Topeka, Atchison, Nebraska City, Omaha, and Denver	$125
Between same points and Salt Lake City	250
Between Denver and Salt Lake City	150
Between Salt Lake City and Boise	125
Between Salt Lake City and Virginia City	125
Through tickets from the Missouri River to Boise and Virginia City	350

TIME:

To Denver City 5 days,
To Salt Lake 9½ days,
To Boise 12½ days,
To Virginia City 13 days,
To San Francisco 16 days.

A treasure and freight express, carried on mail time, in charge of trustworthy and competent messengers, to all of the above named points.

For further information,

Apply at the office of the Company,
No. 35 William street, corner of Exchange place,
New York.

BEN. HOLLADAY, President.
W. S. GURNEE, Vice President.
WM. H. FOGG, } Directors.
EUGENE KELLY, }
S. L. M. BARLOW, }
JOHN E. RUSSELL, Treasurer.
GEO. K. OTIS, Secretary.

E. REMINGTON & SONS,

MANUFACTURERS OF

REVOLVERS, RIFLES,

MUSKETS AND CARBINES,

FOR THE UNITED STATES SERVICE. ALSO

POCKET AND BELT REVOLVERS,

REPEATING PISTOLS,

RIFLE CANES, REVOLVING RIFLES,

Rifle and Shot Gun Barrels, and Gun Materials, sold by Gun Dealers and the Trade generally.

☞ In these days of Housbreaking and Robbery, every house, Store, bank and office should have one of

REMINGTON'S REVOLVERS.

Parties desiring to avail themselves of the late improvements in Pistols, and superior workmanship and form, will find all combined in the new Remington Revolvers.

Circulars containing cuts and description of our Arms will be furnished upon application.

E. REMINGTON & SONS, Ilion, N. Y.
MOORE & NICHOLS, Agents.
40 Cortland streets, New York.

JULIUS G. POHLE, M. D.,

FORMERLY OF, AND SUCCESSOR TO,

Dr. JAMES R. CHILTON & CO.,

Analytical and Consulting Chemist,

No. 489 BROADWAY, - - - - - NEW YORK
(N. W. COR. OF BROOME STREET.)

Analyses and Assays made of Ores of Gold, Silver, Quicksilver, Lead, Copper, Manganeese, Nickel, etc., etc.; Minerals, Alloys, Petroleum, Cummercial Articles, etc

BULLION CONSOLIDATED MINING COMPANY, Colorado.

Mines in Summit and Clear Creek Counties. Shares, 300,000; Stock, $300,000.

J. P. WHITNEY, Secretary, 19 Lindall Street, Boston.

THE UNITY

Gold Mining Company,

OF COLORADO.

Incorporated under the Laws of the State of New York.

CAPITAL STOCK, - - - $100,000.

100,000 Shares of $1 each,

Of which $50,000 are reserved for working Capital.

President.

GEORGE E. COCK, 68 Broadway, New York.

Vice-President.

GEORGE R. WEED, Rutland, Vermont.

Treasurer.

ROBERT G. HOYT, 1 Vesey street, New York.

Secretary.

MARQUIS B. SPAULDING, 2 Astor House, Broadway, New York.

Superintendent at Mines.

GEORGE A. SAYRE, Central City, Colorado.

Counsel.

AMBROSE MONELL, 54 Wall street, New York.

Trustees.

M. B. SPAULDING, of New York.
GEORGE E. COCK, of New York.
R. G. HOYT, of New York.
AMBROSE MONELL, of New York.
GEORGE R. WEED, of Vermont.
J. Q. A. BEAN, of Boston.
WM. TRAIN MUIR, of Colorado.

Office of the Company, No. 2 Astor House, Broadway, N. Y.

The mining property of the Company is situate in the Counties of Clear Creek and Gilpin, in Colorado, and comprises Nine Thousand and Fifty Feet of Quartz Lode claims, and Two Tunnel claims. In this property are Ten Discovery claims, embracing Eleven Hundred Feet of developed Mines—the discovery claim being that point upon the Lode where gold was first found—besides several other claims upon which shafts are sunk, of varying depth. The operations at the mines will, for the present, be confined to the taking out of ore, a demand for which now exists, and will continually increase as new processes of saving gold are improved and perfected. It is not designed to purchase or equip any mill, at least for the present. The whole means and energies of the Company will be applied to the development of their mines.

The Mines of the Company in Gilpin County are situate in the well-known mining districts of Gregory, Nevada, Eureka, Illinois Central, Russell, Central, Lake Gulch, Spring Gulch, etc., etc., sixteen hundred feet being upon

QUARTZ HILL.

In the Gilpin County property are included

400 feet on the	- - - - -	King Solomon Lode.
400 "	- - - - -	Pacific "
200 "	- - - - -	Excelsior "
200 "	- - - - -	Augusta "
600 "	- - - - -	Ontonagon "
200 "	- - - - -	Cox "
600 "	- - - - -	Black "
100 "	- - - - -	Caledonia "
100 "	- - - - -	Mackie "
100 "	- - - - -	Lincoln "
100 "	- - - - -	Landon "
100 "	- - - - -	Pennsylvania "
100 "	- - - - -	Barnhill "
100 "	- - - - -	Grand River "
100 "	- - - - -	Stark County " etc.

The Mines of Gilpin County are too well known to require any extended notice. The above-described property, as will be readily observed, is situate in the best mining districts, and on the most favored localities in the County.

The Company's Mines in Clear Creek County

are situate in well-known districts—Trail Run, Union, Jackson, Ohio, Griffith, etc. In Trail Run the Company own upon the Coyote, Leavenworth and Louisa—on each 100 feet; Coyote Extension, 200; Cornwall, Colorado and Berkshire—on each 300 feet. In Union District, upon the Bobtail, Northrup, Astor, Cook County, etc. In the other districts they own 200 consecutive feet on a number of valuable Lodes. The Mines of Clear Creek County are rich, but not so well developed as those of Gilpin County. In this portion of the property are

Two Tunnel Claims in Union District.

Possessing, as they do, an immense and valuable property—enough for four or five companies—this Company intend to develop it with great vigor, and make every foot of it available. The owners of the property show their faith in this enterprise by receiving their full payment in the stock of the Company, which they agree not to sell until the whole amount of stock reserved for working capital is sold. All of the working capital will be applied to the development of the Company's mines; there are no salaries except that of Superintendent, and no office rent to be paid out of the Company's funds. Work will be commenced at once on the mines.

This enterprise recommends itself. Based upon a sound foundation, managed with skill, and all its operations directed by business ability, it must become a great success.

The stock reserved for working capital is now offered for sale at par, by order of the Board of Trustees. The purchaser of every share of the stock becomes part owner in all the valuable properties of the Company. No future assessments, and no individual liabilities.

Subscription books are open at the Office of the Company, where certificates of mill men who have crushed the ores, specimens and descriptive notices of the property, may be seen

TEXAS

Gold Mining Company,

OF COLORADO.

CAPITAL STOCK, - - - $500,000

50,000 Shares of $10 Each.

Directors:

GEN. WILLIAM T. THOMPSON	New York
WILLIAM W. LAMAN	"
WILLIAM E. PARISH	"
JOSEPH W. HOLMAN	Colorado Territory
JOHN O'NEIL	Philadelphia

President: GEN. WILLIAM T. THOMPSON. **Vice-President:** JOSEPH W. HOLMAN

Secretary and Treasurer: . . WILLIAM E. PARISH.

Office, 155 Broadway, New York, Room No. 9.

The property of the Texas Gold Mining Company is located in the city of Black Hawk and its immediate vicinity, Gilpin County, Colorado, and on the well-known Bob-Tail, Fisk, and other Lodes.

325 feet on the	Bob-Tail.
200 feet on the	Fisk.
200 feet on the	Chambers.
400 feet on the	Pennsylvania.
200 feet on the	Galena.
200 feet on the	Hoosier.

It is useless to repeat to the public the value of the (Bob-Tail and Fisk) Lodes, as every one with the slightest knowledge of Colorado knows their great value, and the large amount of Gold they have already produced. It is well-known that, with the LYON process of treating Ores, we are safe in saying the Ores from the Bob-Tail and Fisk will yield not less than $100 per ton.

This Company is organized for the purpose of IMMEDIATELY DEVELOPING and working the Lodes, and it is proposed to PUSH the work with the UTMOST ENERGY.

The Directors have every confidence that their efforts will produce, with the facilities already at their command, SATISFACTORY AND SPEEDY RESULTS.

COLORADO HAS ALREADY PRODUCED OVER 73,000,000

OF DOLLARS IN GOLD.

Her prospects were never so brilliant as now. LYON'S process of Smelting Ores has succeeded beyond his most sanguine expectations, and the cry that we cannot save the Gold is forever silenced.

Below we give the amount of Gold taken out of the Bob-Tail Lode up to January 1st, A. D. 1865:

Genoil, Burghardt, Ingalls and Culbertson	$250,000
Hurlburt, Holman & Dinton	450,000
Crandall, Hall, Patterson, Cook & Willson	450,000
Black Hawk Co., or Lee, Jud & Lee	500,000
Smith, Chaffee & Fields	425,000
Sensindeffer & Buckmiller	300,000

WOOLWORTH & BARTON,

Overland Forwarders to all Points in Colorado, Utah, Montana and New Mexico Territories.

GENERAL OFFICES, ST. JOSEPH, Mo., and NEBRASKA CITY, NEBRASKA.

DANIELS & BROWN, Agents, Denver City. F. E. SHORT, Travelling Agent.

H. B. MURRAY, General Eastern Agent, 291 Broadway, cor. Reade St., New York.

INCRUSTATION OF

STEAM BOILERS.

This greatest of evils in the use of steam is entirely prevented by the "Anti-Incrustable Powder" of

H. Winans, 11 Wall Street, New York.

INVENTED AND INTRODUCED IN 1855.

now ten years in successful operation in over 6,000 boilers, without injury, and saving many times its cost in fuel and repairs.

A clean boiler generates steam more freely, and will outlast ten dirty or incrusted ones.

CARD.—Professor H. DUSSANCE, Chemist, lately from the laboratory of the French Government, will leave for Europe in the middle of May, where he will reside several months. He takes occasion to inform his numerous friends that he is ready to transact any business there in the chemical line, such as buying books and apparatus, machinery, presses, etc., selling chemical patents, etc. For further information address New Lebanon, N. Y.

WINCHESTER'S HYPOPHOSPHITES

THE SPECIFIC REMEDY FOR

CONSUMPTION,

NERVOUS DEBILITY,

And all Disorders of the Lungs, Nervous and Blood Systems.

The success of the Hypophosphites during the past ten years in the Cure of that greatest scourge of the race, CONSUMPTION, is "unparalleled in the annals of medicine." The new and thoroughly Scientific Remedy acts with Invariable Efficacy in all stages of tubercular diseases. It relieves the cough, checks the perspirations, subdues the chills and fever, diminishes the expectoration and promotes refreshing sleep. "All the General Symptoms Disappear with a Rapidity which is really Marvellous." CURE is the rule—DEATH the exception.

Their beneficial effects are equally PROMPT and CERTAIN in all derangements of the Nervous and Blood systems—being unsurpassed as a Nervous Tonic, and generator of new and healthy blood; whilst for cases of General Debility, Loss of Strength, Flesh, and Appetite, Dyspepsia, Neuralgia, Paralysis, Chronic Bronchitis, Asthma, Scrofula, Chronic Diarrhœa, is the most efficacious treatment known. A Fair Trial is a Certain Cure. (Circulars free.)

PRICES: In 7-oz. and 16-oz. bottles, $1 and $2 each. Six small or three large bottles for $5, by express. Sold by all respectable druggists, and at the sole general depot, wholesale and retail, by

J. WINCHESTER & CO.,
36 John Street, N. Y.

THE SPECIFIC PILL

A PROMPT AND CERTAIN REMEDY FOR

Spermatorrhea, or Seminal Weakness,

Or Involuntary Nightly or Daily Loss, however caused, or however severe; while they will speedily correct those Morbid Conditions arising from the original disease or from Secret Vice.

THE SPECIFIC PILL is equally suited to the treatment of every species of Genital or Urinary Irritability, "Lime," or "Brick-dust," deposites in the Urine, "Milky" discharges and Weakness of the Kidneys.

PROFESSIONAL OPINIONS: "I have used your Specific Pill in many cases of Spermatorrhea with the most perfect success."—J. MILTON SANDERS, M. D., L. L. D.

"I have cured very severe cases with from six to ten Boxes of your Specific Pill."—B. KEITH, M. D.

Price: $1 per box. Six boxes for $5, by mail. Address

J. WINCHESTER & CO.,
36 John Street, N. Y.

THE GOLDEN TABLET

AN INFALLIBLE

NEUTRALIZER OF ALL SUPER-FICIAL POISONS, OR VIROUS.

This is one of the grandest discoveries in medical science of which the present century can boast. It instantly neutralizes, destroys and renders perfectly harmless every species of poisonous or infectious virous affecting either the external skin, or the internal mucous membrane.

THE LOCATION, CHARACTER OR NAME

of the disorder is of no importance, so that it can be reached by Washing, Gargling or Injecting. The GOLDEN TABLET is a sovereign remedy for Itch, Salt Rheum, Hives, Prickly Heat, and all other cutaneous eruptions; the poison of Oak, Ivy, Sumach; bites of Venomous Insects; Piles in all their forms; Sore Lips, Sore Eyes, Sore Nipples, Old Sores, Catarrh, Ulcerated Throat, Diptheria in its first stages; Female Weaknesses of every kind—in short, for every species of Inflammation or Virulent Conditions and Humors of the Internal Mucous Membrane, or External Skin. Communications confidential, and advice gratis.

THE GOLDEN TABLET

is, from its many beneficent uses, Woman's Best Friend, and Man's Surest Safeguard. ☞ Every adult, of both sexes, will find it indispensable to them, as will be better understood from a perusal of the Circular, which is sent free to all. Irritation almost instantly allayed in every instance.

PRICE: $1 per Box; six Boxes, $5, by Mail. Sold only at the General Depot of "WINCHESTER'S HYPOPHOSPHITES (for Consumption and Nervous Debility), by the Sole Agent,

J. WINCHESTER,
36 John Street, N. Y.

To whom all orders should be addressed

GOMEZ SUBMARINE

ELECTRIC FUSE,

For Oil Wells, Mines, Blasting, Military and Naval War purposes,

124 BLEECKER STREET, NEW YORK.

NEW YORK ROCK DRILL COMPANY.

OFFICE, 137 BROADWAY.

GEN. E. M. BARNUM, PRESIDENT, . . . G. A. GARDNER, SECRETARY.

This company are prepared to fill orders for Drilling Machines for all kinds of Rock work, for outside work, and for Mining.

The Machines now offered for sale are :

No. 1 Hand machine for ONE man, weighing 100 lbs., with 3 drills, complete,..... $ 200 00
No. 2, " TWO " " 125 " " " 250 00
No. 3. 1 horse power Machine, weighing 150 lbs., with 8 ft. steam hose, 3 drills, complete, 450 00
No. 4, 2 " " " 250 " " " " " 850 00
No. 5, Machine for VERTICAL drilling, *without engine*, to drill holes 4 to 6 inches diameter, with timber frame on wheels, &c.....$1,000 00
No. 6, Machine (entirely of iron), drilling at any angle holes 4 to 8 inches diameter, with *nominal* 4 horse power engine (on truck, and moved by own engine), $2,500 to 3,000 00

These are the only machines that have done regular work in this Country, and are the most Simple, Compact and Economical. We invite the closest scrutiny. A full sized Mining Drill can be seen daily, drilling into a block of Rockport (Mass.) Granite, the hardest Granite known, at the Machine Shop of STERLING & KERR, No. 344 and 346 West 24th street, West of 10th avenue.

GARDNER'S PATENT ROCK DRILLING MACHINE FOR MINING PURPOSES.

DRIVEN BY STEAM OR COMPRESSED AIR. G. A. GARDNER, PATENTEE, NEW YORK.

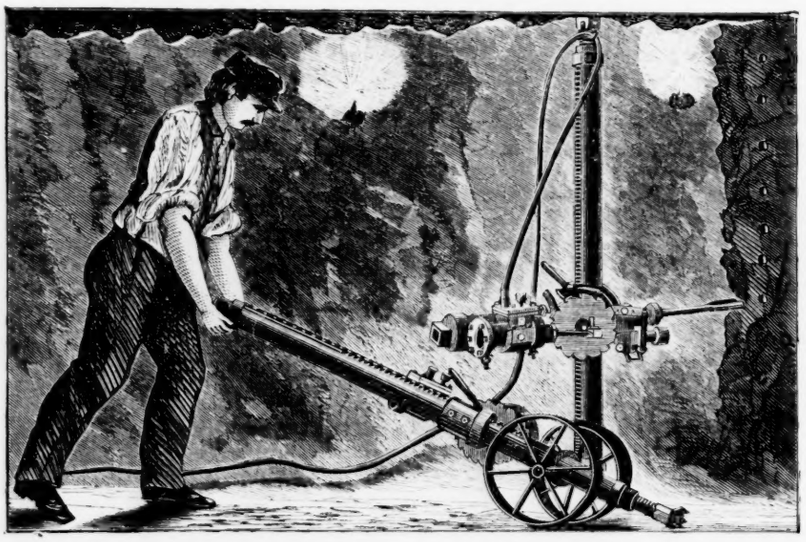
Certificate.

NEW YORK, March 25, 1866.
MR. G. A GARDNER, Sec'y N. Y. Rock Drill Co.:

SIR—After witnessing the operation of your Rock Drilling Engines on several occasions, . . . I am satisfied that they are capable of boring much faster than by HAND in any kind of rock, and will operate with about equal efficiency at any angle in a vertical or horizontal plane; that they can work in confined spaces, such as shafts and drifts of mines, railroad tunnels, etc., etc.; that several drills can be used where only one could be operated by hand labor. These Machines may be driven by compressed air. It appears to me highly probable that the time required to open mines by machinery may not be more than one-fourth of that which is now required.

The advantages resulting from such a reduction of the time can hardly be over estimated.

Very respectfully,
GEO. D. EMERSON, Mine Engineer,
Late of Lake Superior, Mich.



Certificate.

No. 95 Liberty street, }
NEW YORK, March 23, 1866. }

MR. G. A. GARDNER, Secretary N. Y. Rock Drill Co.

DEAR SIR: Respecting the "Gardner Drill," I would say, we used it with perfect success on the Niagara Falls Canal. When we first worked it, we drilled in the solid limestone, holes of the diameter of six inches, at the rate of eighteen inches deep, in twenty minutes.

We used it for several months on the regular work, and found it more economical and effective than any other drill we have ever used. The rock is the hardest kind of blue limestone, with occasional boulders of quartz imbedded in it. You are at liberty to refer parties to me who may desire more particulars.

S. M. ALLEN,
Late President of Niagara Falls Water Power Company

This cut represents a section of a mining tunnel, or *drift*, 6x4½ feet, with two Drilling Engines; one driven by *compressed air*, drilling horizontal holes, the other being moved by the Engineer to its position on a pair of wheels *temporarily* attached to its supporting column; three of these columns, with two machines on each, may be worked in a drift of this size, producing as much working effect as fully seventy-five men. A drift of this size through solid rock (Granite for example) can be thus driven ten lineal feet every 24 hours.

These machines are very compact, measuring—independent of supporting column, etc.—30 inches in length by 12 inches breadth and depth, and weighing only 250 lbs. One man can move and adjust them to the work. The supporting column is held firmly in place by setting out the jack-screw, thus bracing it between the top and bottom of tunnel, or the sides of shaft, and the machines are raised and lowered by a gear working in the rack on side of column, while the attachments to the column form a *universal joint* and allow the machines to work *at any angle*. They are automatic; one engineer can attend to a gang of four or six, working on the same face. Six of them can be worked in a heading four and a half by six feet; and in a shaft six by twelve feet, eight of them can be worked at once. In a railroad, or other large tunnel, an increased number of machines can be operated, being supported and moved upon a carriage running on rails. The blow is struck by the drill being projected by the reactive force of an india rubber spring, against the rock, the drill being as free from the working machinery at the instant of striking, as an arrow shot from a bow; 300 blows per minute can be given with the utmost force the steel-drill point can bear. The cross-head to which the drill is attached is drawn back; (thus compressing the spring) by a cam rotated directly by the piston rod of an oscillating cylinder, the drill point has an automatic turning motion, and the entire machine an automatic feed, *self-regulating*, according to the varying hardness of the rock; the machine working equally well with the same adjustment when drilling on flint, or on granite cutting two inches deep per minute, or on mealstone, sandstone, or other softer rocks, cutting four and six inches per minute. They drill equally well at any angle, and with them holes can be put in the most difficult places with great facility.

Machines for open cuts have been worked for several years on railroad and canal excavations, operated by four horse engines drilling four, six and eight-inch diameter holes, and doing the work of fifty men. Rock-Drilling can be done with these machines for one-tenth the cost of hand labor, and in one-tenth the time. We are prepared to furnish machines with *gangs of drills* for splitting granite, marble, etc; *channelling machines* for marble, etc., when blasting is to be avoided; also machines for cutting the "BEARING IN" in Bituminous Coal Mines: we also manufacture the GARDNER PATENT DRILL POINTS, especially de-sirable for sinking oil wells; making round holes, requiring no reaming, and cutting faster than any other point.

PROSPECTUS

OF THE

Petroleum Fire-Proof Iron Tank Storage Company,

ORGANIZED BY SPECIAL ACT OF THE LEGISLATURE OF THE STATE OF NEW YORK.

APPROVED BY THE GOVERNOR, APRIL 11th, 1866.

ORGANIZATION.

President, L. S. WATKINS. Vice-President, J. C. CARY.
Treasurer, GEO. S. BATCHELLER. Secretary, S. E. MARVIN. General Superintendent, Hon. ADAM W. KLINE.
Executive Committee: President, L. S. WATKINS; Vice-President, J. C. CARY; Superintendent, ADAM W. KLINE.

The object of the above named corporation is to secure the construction of Iron Tanks, made from boiler iron, rivited, with covers, and to be air tight.

These tanks will be located at Titusville and other points in the Oil Regions, near the railroads, where the pipes, conducting oil from wells, terminate. The Company will also store oil for parties and insure the same against fire or flood. The business will also embrace the purchase of oil on their own account at certain stages of the market and hold the same for an advance, relying upon the security of the tanks for its preservation, until the price will warrant its disposal. Persons have never engaged in this trade on account of the insecurity in storing oil in wooden tanks. The Downer Oil Company have several of these iron tanks at their Refinery in Corry, and by their use are enabled to take advantage of the market in the summer season and provide their supply for the winter.

The established reputation of Mr. L. S. WATKINS, the President of the Company, as one of the oldest and most successful operators in the oil trade, is a security to stockholders of the success of this organization.

The Capital Stock of the Company is five hundred dollars ($500,000), divided into five thousand shares of one hundred dollars each.

A limited amount of the above stock will, for the present, be sold at the rate of thirty five dollars per share.

Persons desiring to secure any of said stock on above terms, can address Gen. G. S. BATCHELLER, Treasurer, Room 5, No. 544 Broadway, New York City, or to his address at Albany, N. Y., or the same may be procured of any other officer of the Company.

REFERENCES.

The Company respectfully refer the public to the following gentlemen as to the general character of this enterprise, and the integrity and character of the officers :

His EXCELLENCY R. E. FENTON, Governor of New York.
His Honor THOS. G. ALVORD, Lieutenant-Governor of New York.
Hon. JOHN THOMPSON, (Late M. C.), Poughkeepsie, New York.
Hon. JAMES M. COOK, (Late State Comptroller and Bank Superintendent), Saratoga, New York.
Hon. CLARK B. COCHRANE (Late M. C.), Albany, New York.
Hon. HENRY R. SELDEN (Late Judge Court of Appeals), Rochester, New York.
ALEX. W. HARVEY (Judge Adv. Gen., S. N. Y.), Buffalo, New York.
AUGUSTUS C. TAYLOR, Esq., Buffalo, New York.
Gen. E. A. MERRITT, Quartermaster-General S. N. Y., State Arsenal, New York City.
R. C. ROOT, Esq., Vice-President Atlantic Bank, New York City.
DAVID COWEE, Second National Bank, Troy, New York,
Dr. F. B. BREWER, First National Bank, Titusville, Pa.
SAMUEL DOWNER "Downer Oil Works," Corry, Pa,